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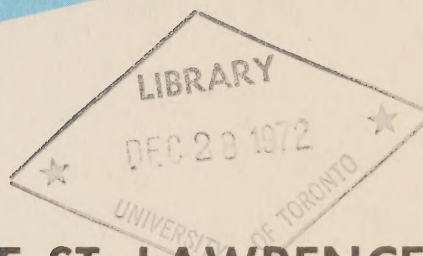
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DEPARTMENT OF THE ENVIRONMENT
Ottawa

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GULF OF ST. LAWRENCE

September 17 to October 7, 1969

NO. 2

1971 Data Record Series

Canada

(Canadian) Oceanographic Data Centre

Programmed by the
Canadian Committee on Oceanography

1971

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GULF OF ST. LAWRENCE
September 17 to October 7, 1969

CODC Reference: 1810-69051

NO. 2

1971 Data Record Series

Canadian Oceanographic Data Centre
615 Booth St., Ottawa, Canada

Programmed by the Canadian Committee on Oceanography

DEPARTMENT OF ENERGY, MINES AND RESOURCES
and
FISHERIES RESEARCH BOARD OF CANADA

GULF OF ST. LAWRENCE

Ship: CSS "Dawson"

Local cruise designation: BI 69-051

CODC cruise reference no: 1810-69051

Cruise period
Phase 1: September 17-September 21, 1969
Phases 2-5: September 21-October 7, 1969

Officer-in-Charge
Phase 1: W.D. Forrester
Phases 2-5: F. Keyte

Observers: A.J. Hartling
R. Russell
R. McElmon
G. Seibert
A.E. Swyers

ATLANTIC OCEANOGRAPHIC LABORATORY
and
MARINE ECOLOGY LABORATORY

Bedford Institute, Dartmouth, N.S.

SECTION I

Description of data collection procedures



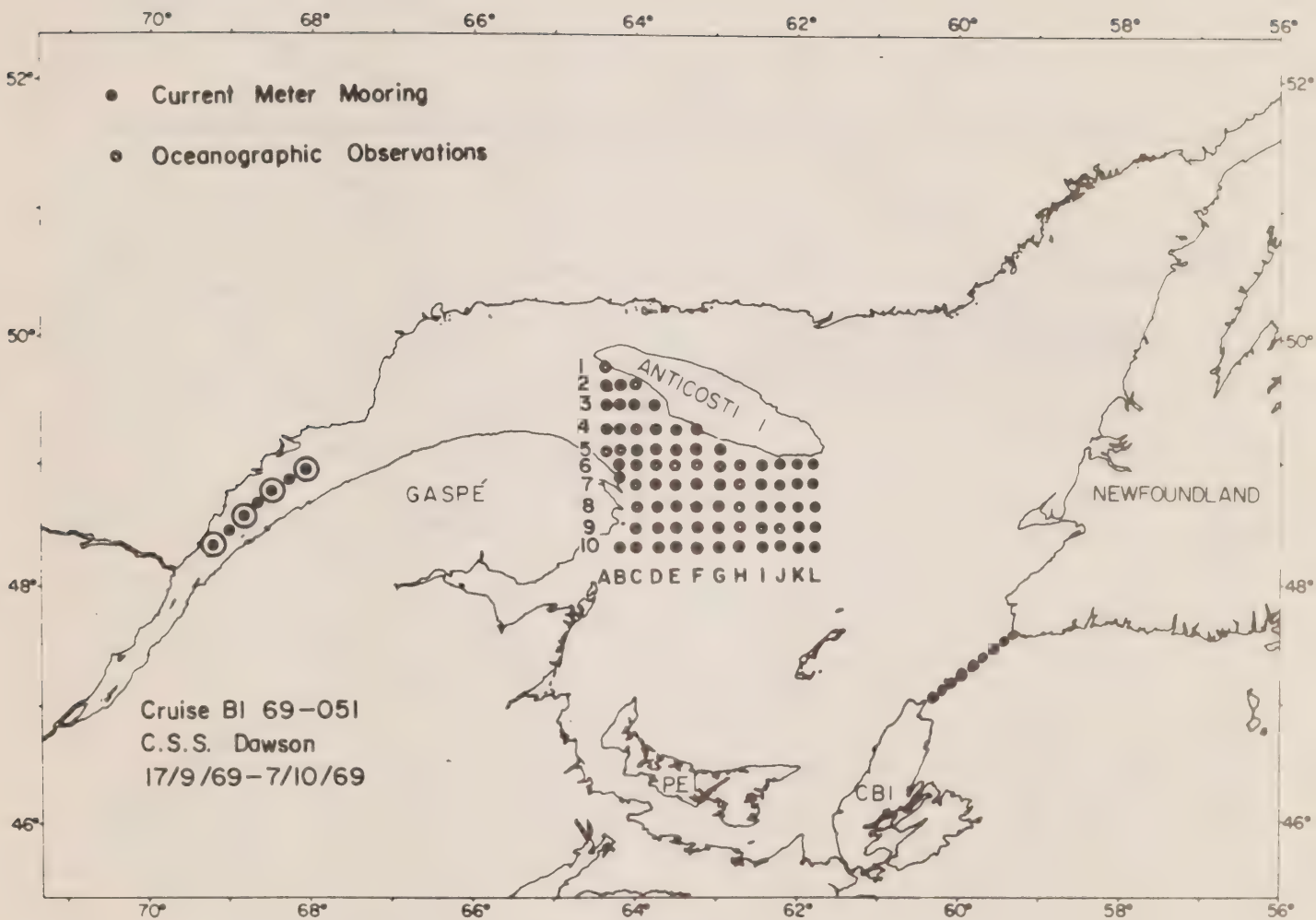


Fig. 1 General area of investigation, Cruise 69-051. Phase 1 (Estuary), Phase 3 (Circulation study), and Phase 4 (IBP program) are shown. For Phase 2 (Saguenay River) see Fig. 2, for Phase 5 (Gaspé Current) see Fig. 4. Phase 3 is drawn to larger scale in Fig. 3.

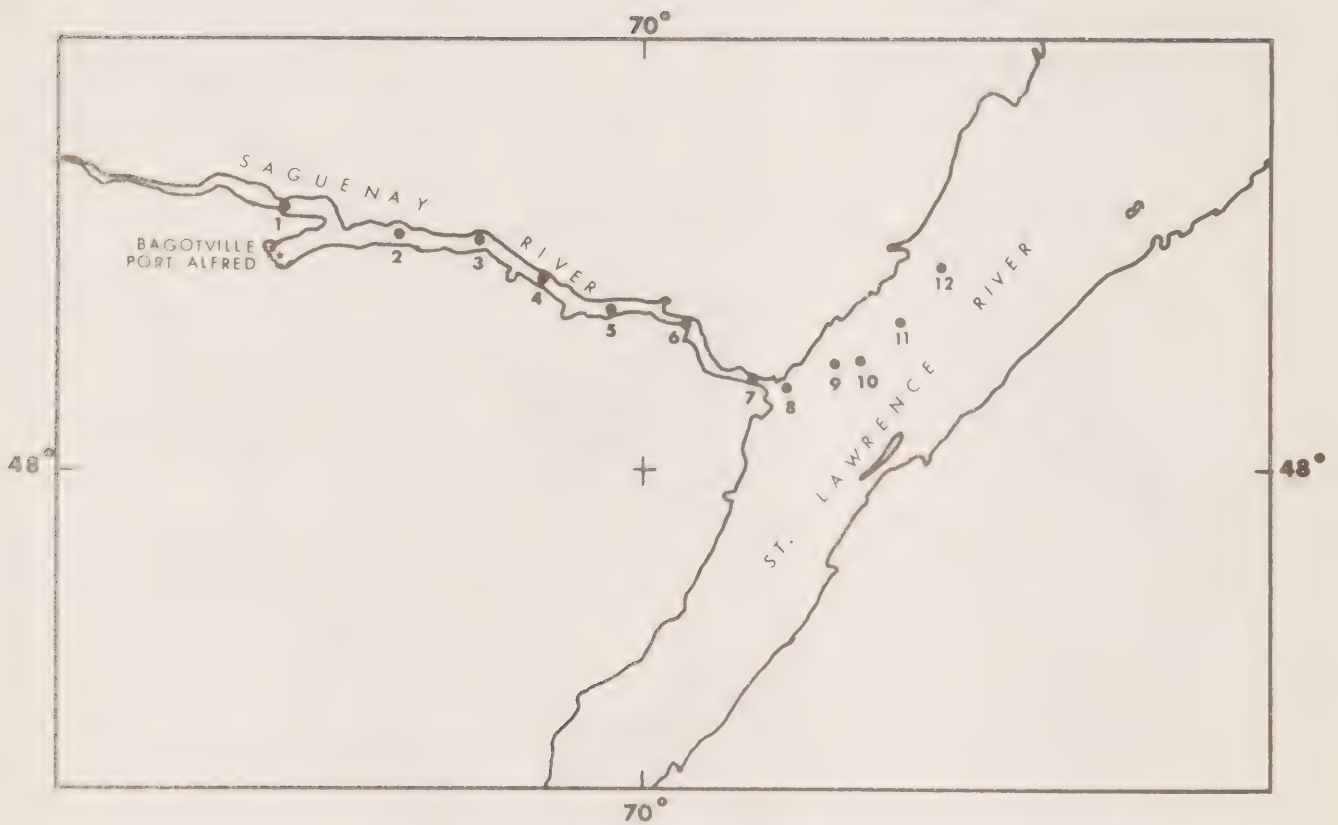


Fig. 2 The twelve Saguenay River stations are shown in this figure. SR#1 was occupied by 69-051 station 5, SR#9 by 69-051 station 13. No data was recorded from SR#10 because of equipment malfunction. SR#11 and SR#12 were not occupied. This was Phase 2 of Cruise 69-051.

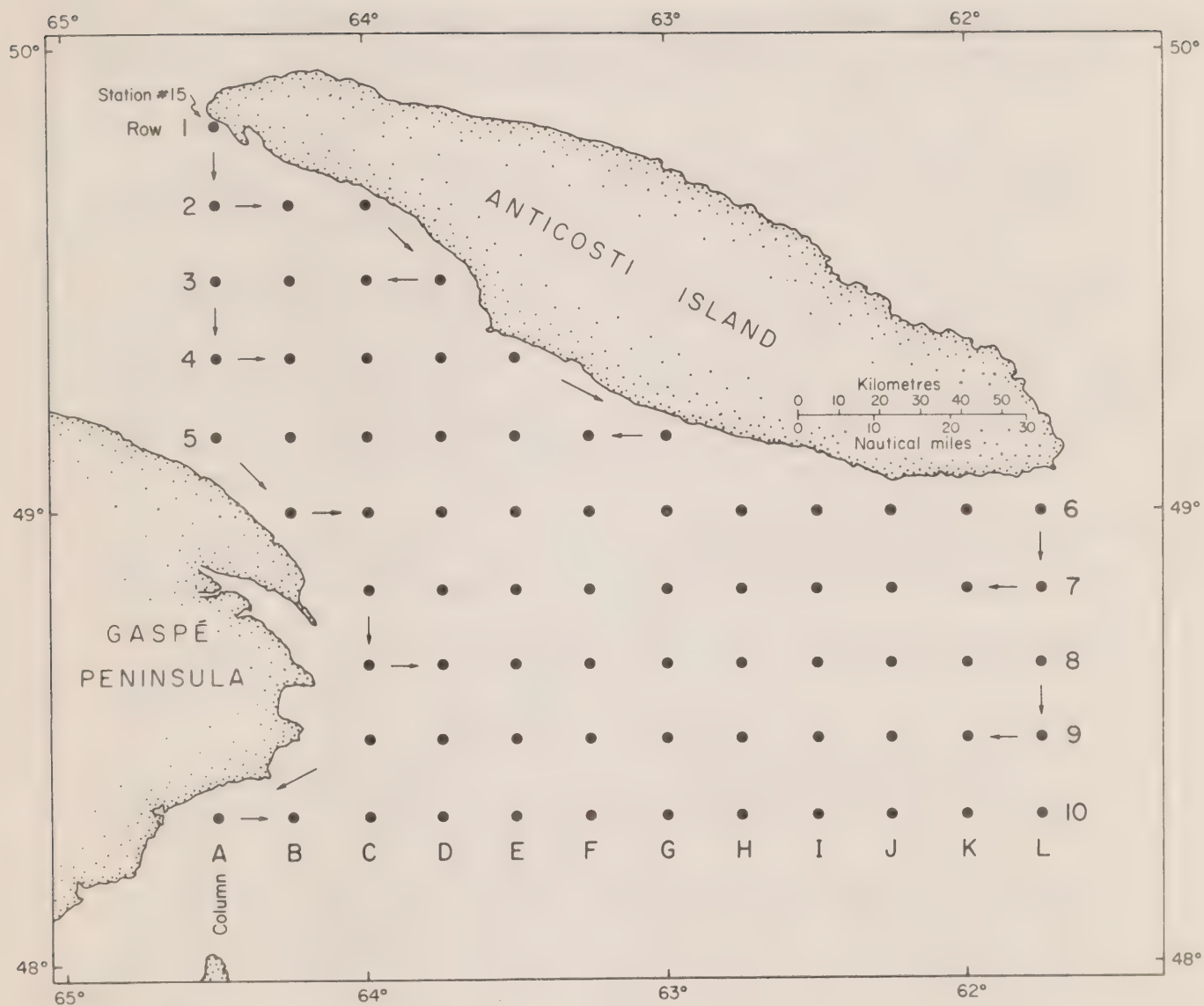


Fig. 3 Grid of stations for circulation study, Phase 3 of Cruise 69-051.

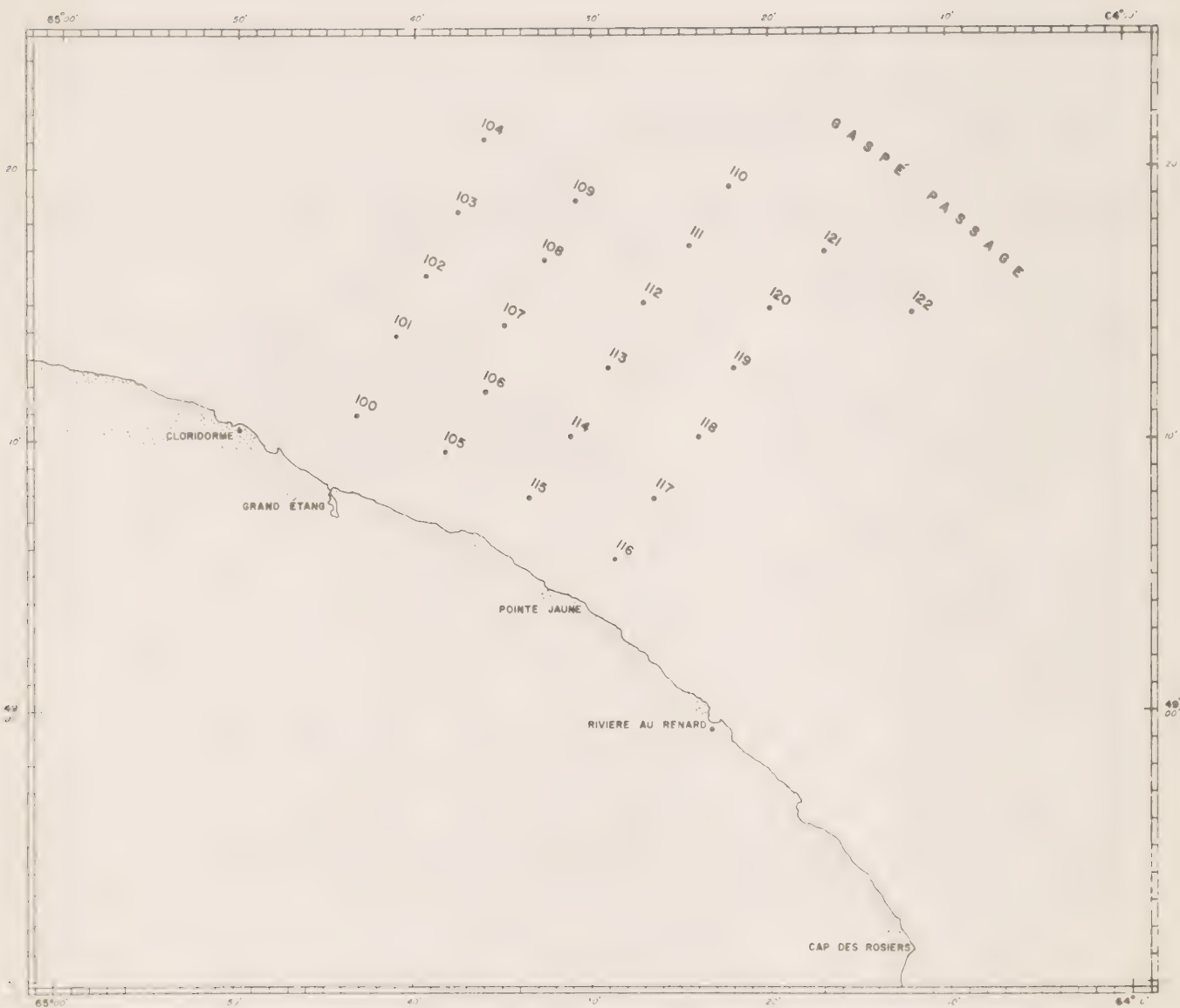


Fig. 4 Stations 100-122, for Phase 5 of Cruise 69-051. Station 122 was to be the beginning of a fifth line of stations normal to the Gaspé Current, but this last line could not be completed.

INTRODUCTION

Cruise 69-051 took place in the Gulf of St. Lawrence in September-October 1969 aboard CSS "Dawson" and may conveniently be divided into five different phases. See Figures 1-4 for track charts.

Phase 1 (Stations 1-4). Four stations were occupied in the Estuary by W.D. Forrester to study internal tides from tidal stream observations (Fig. 1).

Phase 2 (Stations 5-14). This set of stations was taken along the Saguenay River and St. Lawrence Estuary by F. Keyte, as part of a continuing study of the Saguenay. Fig. 2 shows the twelve designated stations SR#1 - SR#12. Thus 69-051 station 5 occupied SR#1, and 69-051 station 13 occupied SR#9. Because of undetected equipment failure, 69-051 station 14 (SR#10) was not recorded on the STD magnetic tape data logger (F.K. Keyte, 1970). SR#11 and SR#12 were not occupied.

Phase 3 (Stations 15-90). A study of circulation patterns was undertaken over a rectangular grid south of Anticosti Island by F. Keyte (Fig. 3) (F.K. Keyte and R.W. Trites, 1971).

Phase 4 (Stations 91-99). Nine stations were occupied across Cabot Strait for the International Biological Program (IBP) by F. Keyte (Fig. 1).

Phase 5 (Stations 100-122). Twenty-three stations were occupied in four lines normal to the Gaspé current near Cloridorme P.Q. by F. Keyte and G. Seibert to study current flow and shear in that region (Fig. 4).

Except for Phase 1, all stations were taken with the Guildline STD (Salinity-Temperature-"Depth"; actually Pressure) sensor.

PERSONNEL

Dr. W.D. Forrester	Senior Scientist	Phase 1
F. Keyte	Senior Scientist	Phases 2-5
T.R. Foote		Phase 1
A.J. Hartling		Phases 1-5
Dr. E.M. Hassan		Phases 2-5
Mrs. P. Lomas		Phases 1-5
W.J. MacNeil		Phase 1
R. Russell		Phases 1-5
R. McElmon		Phases 1-5
G. Seibert		Phases 1-5
A.E. Swyers		Phases 1-5

OBSERVATIONAL PROCEDURES

The STD measures the three variables as d-c voltages, and outputs on analog x-y graphs as well as on IBM-compatible magnetic tape. Aboard ship there was no way of processing the tape, so temperatures and salinities were extracted from the graphs at selected pressures by hand. However, the STD data used in this cruise report came from computer processing of the magnetic tape (F.K. Keyte, 1970). Accuracy estimations of the STD data, made after comparison with bottle stations, were: P ± 0.1 dbar, T $\pm 0.03^\circ\text{C}$, S $\pm 0.03\text{‰}$.

STD DATA REDUCTION

STD data are received on magnetic tape, output from the Bedford program STDHP (F.K. Ketye 1970). At CODC the uptrace is removed by editing. The downtrace remaining is reduced, saving levels that are equal to or immediately above standard depths and others that minimize the error upon linear interpolation. Each station is restricted to a maximum of 99 levels. The printout of STD data shown in this publication includes only the standard levels. These are calculated using the Reiniger-Ross interpolation method. In a future edition of Oceans IV a linear interpolation option will be available especially for STD data. This will permit reproduction of intermediate points of the curve within the reduction error limits. The error codes are listed below and a sample of the complete STD station output is on the following pages.

ERROR CODES

J'	.01	Q	.07
K	.02	R	.08
L	.03	S	.09
M	.04	T	.1
N	.05	U	UNREDUCED
P	.06	V	GREATER THAN .1

CRUISE NUMBER 69051

STATION NUMBER 021

LAT	N49 30.00	YEAR	1969	WAVE-P/H	WIND-DIR	WW	COUN	18
LONG	W 64 15.00	MONTH	9	SWEL-P/H	WIND-SPD	CLD-A	INST	10
DEPTH	272.0	DAY	23	SWEL-D	AIR-TEM		RESTR	
MARSD	SQ	H/M	1244	BARO	WET-BLB		UNAS	038

O B S E R V E D

TIME	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
1244	2.5	2.4M	7.460L	7.460	30.413M	2378	2378	1474.9C	0	0	4134
1244	6.5	6.5M	7.400L	7.399	30.385M	2376	2376	1474.7C	17	1	4148
1244	6.8	6.8M	7.160L	7.159	30.367M	2378	2378	1473.7C	18	1	4131
1244	7.9	7.9M	6.880L	6.879	30.432M	2387	2387	1472.7C	23	1	4048
1244	8.3	8.3M	6.620L	6.619	30.443M	2391	2391	1471.7C	24	1	4009
1244	8.9	8.9M	6.410L	6.409	30.557M	2402	2402	1471.0C	27	2	3898
1244	9.7	9.8M	6.290L	6.289	30.631M	2410	2410	1470.6C	30	2	3829
1244	12.0	12.1M	5.880L	5.879	30.762M	2425	2425	1469.2C	39	3	3685
1244	14.4	14.5M	5.230L	5.229	30.949M	2447	2447	1466.8C	47	4	3475
1244	15.6	15.7M	5.110L	5.109	30.992M	2452	2452	1466.4C	52	5	3430
1244	16.7	16.9M	4.870L	4.869	31.046M	2458	2458	1465.5C	56	5	3365
1244	17.6	17.2M	4.760L	4.759	31.089M	2463	2463	1465.1C	57	5	3321
1244	18.6	18.6M	4.620L	4.619	31.133M	2468	2468	1464.6C	61	6	3274
1244	19.7	19.7M	4.500L	4.499	31.168M	2472	2472	1464.1C	65	7	3237
1244	22.0	22.2M	4.340L	4.338	31.206M	2476	2476	1463.6C	73	9	3192
1244	23.7	23.9M	4.090L	4.088	31.220M	2480	2480	1462.5C	78	10	3159
1244	25.1	25.3M	3.680L	3.678	31.219M	2484	2484	1460.8C	83	11	3123
1244	25.7	25.9M	3.440L	3.438	31.272M	2490	2490	1459.9C	85	12	3062
1244	26.5	26.5M	2.890L	2.889	31.218M	2490	2490	1457.4C	86	12	3059
1244	28.2	27.1M	2.320L	2.319	31.449M	2513	2513	1455.3C	88	13	2842
1244	27.6	27.6M	2.190L	2.189	31.518M	2520	2520	1454.8C	90	13	2780
1244	29.5	29.7M	2.120L	2.119	31.523M	2521	2521	1454.5C	95	15	2771
1244	34.7	34.0M	1.840L	1.838	31.614M	2530	2530	1453.5C	107	18	2683
1244	38.5	38.8M	1.110L	1.108	31.791M	2549	2549	1450.5C	120	23	2504
1244	43.9	42.2M	0.840L	0.838	31.868M	2556	2556	1449.5C	128	27	2430
1244	49.1	49.5M	0.700L	0.698	31.924M	2562	2562	1449.0C	145	35	2380
1244	49.0	50.2M	0.660L	0.658	31.950M	2564	2564	1448.9C	147	36	2358
1244	51.1	51.5M	0.680L	0.678	32.003M	2568	2568	1449.1C	150	37	2319
1244	53.0	53.0M	0.830L	0.828	32.034M	2570	2570	1449.8C	154	39	2304
1244	53.6	53.6M	0.970L	0.968	32.008M	2567	2567	1450.4C	155	40	2331
1244	58.4	58.8M	0.700L	0.698	32.037M	2571	2571	1449.3C	167	47	2294
1244	60.5	60.9M	0.660L	0.658	32.097M	2576	2576	1449.3C	172	50	2246
1244	61.0	61.4M	0.700L	0.698	32.094M	2575	2575	1449.5C	173	50	2251
1244	62.3	62.8M	0.680L	0.678	32.118M	2577	2577	1449.4C	176	52	2232
1244	63.7	63.6M	0.790L	0.788	32.140M	2578	2578	1450.0C	178	53	2220
1244	67.6	68.1M	0.810L	0.807	32.224M	2585	2585	1450.2C	188	60	2157
1244	68.4	68.9M	0.760L	0.757	32.202M	2584	2584	1450.0C	189	61	2172
1244	68.9	69.4M	0.670L	0.667	32.197M	2584	2584	1449.6C	191	62	2170
1244	69.8	70.3M	0.620L	0.617	32.260M	2589	2589	1449.5C	192	63	2119
1244	70.7	70.8M	0.600L	0.597	32.229M	2587	2587	1449.3C	194	64	2142
1244	70.7	71.4M	0.470L	0.467	32.264M	2590	2590	1448.8C	195	65	2109
1244	72.0	72.7M	0.520L	0.517	32.323M	2595	2595	1449.1C	198	67	2066
1244	73.0	74.1M	0.710L	0.707	32.331M	2594	2594	1450.0C	200	69	2070
1244	73.3	74.8M	0.540L	0.537	32.289M	2592	2592	1449.2C	202	70	2093
1244	75.0	75.5M	0.480L	0.477	32.336M	2596	2596	1449.0C	203	71	2054

CRUISE NUMBER 69051

STATION NUMBER 021

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
1244	77.0	77.5M	0.510L	0.507	32.382M	2599	2599	1449.3C	207	75	2021
1244	78.8	79.4M	0.610L	0.607	32.408M	2601	2601	1449.8C	211	78	2006
1244	85.0	85.6M	0.670L	0.667	32.447M	2604	2604	1450.2C	224	88	1979
1244	89.7	90.3M	0.850L	0.846	32.497M	2607	2607	1451.2C	233	96	1951
1244	90.0	90.6M	0.910L	0.906	32.545M	2610	2610	1451.5C	233	97	1918
1244	93.5	94.2M	0.990L	0.986	32.578M	2612	2612	1452.0C	240	103	1897
1244	99.6	100.3M	1.130L	1.126	32.655M	2618	2618	1452.8C	252	115	1847
1244	105.1	105.8M	1.310L	1.305	32.792M	2628	2628	1453.9C	262	125	1755
1244	106.9	107.7M	1.390L	1.385	32.817M	2629	2629	1454.3C	265	129	1740
1244	116.6	117.4M	1.490L	1.485	32.911M	2636	2636	1455.1C	281	148	1676
1244	120.3	121.1M	1.530L	1.524	32.939M	2638	2638	1455.3C	288	155	1658
1244	123.4	124.3M	1.650L	1.644	32.973M	2640	2640	1456.0C	293	162	1640
1244	125.0	125.9M	1.690L	1.684	33.007M	2642	2642	1456.2C	295	165	1617
1244	130.2	131.1M	1.800L	1.793	33.076M	2647	2647	1456.9C	304	176	1573
1244	132.8	133.7M	1.970L	1.963	33.166M	2653	2653	1457.8C	308	181	1517
1244	138.8	139.8M	2.030L	2.023	33.194M	2655	2655	1458.2C	317	194	1500
1244	140.4	141.4M	2.140L	2.132	33.319M	2664	2664	1458.9C	319	198	1414
1244	145.5	146.5M	2.300L	2.292	33.375M	2667	2667	1459.7C	326	208	1385
1244	148.3	149.3M	2.330L	2.322	33.415M	2670	2670	1460.0C	330	214	1357
1244	149.9	150.9M	2.390L	2.382	33.442M	2672	2672	1460.3C	332	217	1341
1244	153.4	154.5M	2.520L	2.511	33.504M	2676	2676	1461.0C	337	224	1305
1244	155.9	157.0M	2.580L	2.571	33.550M	2679	2679	1461.4C	340	230	1275
1244	156.8	157.9M	2.630L	2.621	33.635M	2685	2685	1461.7C	342	231	1215
1244	157.6	158.7M	2.840L	2.831	33.645M	2684	2684	1462.7C	343	233	1226
1244	159.4	160.5M	2.930L	2.920	33.622M	2681	2682	1463.1C	345	237	1251
1244	163.5	164.6M	2.980L	2.970	33.663M	2684	2684	1463.4C	350	245	1225
1244	165.3	166.5M	3.130L	3.120	33.687M	2685	2685	1464.1C	352	249	1220
1244	167.1	168.3M	3.110L	3.100	33.732M	2689	2689	1464.1C	354	253	1185
1244	168.0	169.2M	3.280L	3.269	33.769M	2690	2690	1464.9C	355	255	1173
1244	169.8	171.0M	3.330L	3.319	33.814M	2693	2693	1465.2C	358	258	1144
1244	171.5	172.7M	3.450L	3.439	33.803M	2691	2691	1465.7C	359	262	1162
1244	173.3	174.5M	3.440L	3.429	33.853M	2695	2695	1465.8C	362	265	1124
1244	175.1	176.3M	3.600L	3.588	33.865M	2695	2695	1466.5C	364	269	1132
1244	178.6	179.9M	3.710L	3.698	33.895M	2696	2696	1467.1C	368	276	1120
1244	186.0	187.3M	3.800L	3.787	33.986M	2702	2702	1467.7C	376	291	1061
1244	188.5	189.8M	3.890L	3.877	34.002M	2703	2703	1468.1C	378	296	1059
1244	190.4	191.7M	3.910L	3.897	34.081M	2709	2709	1468.4C	380	300	1001
1244	192.3	193.6M	4.010L	3.996	34.067M	2707	2707	1468.8C	382	304	1021
1244	194.9	196.3M	4.050L	4.036	34.083M	2707	2708	1469.0C	385	309	1013
1244	199.3	200.7M	3.800L	3.786	34.092M	2711	2711	1468.1C	389	318	982
1244	200.2	201.6M	3.790L	3.776	34.096M	2711	2711	1468.0C	390	320	978
1244	201.0	202.4M	3.780L	3.766	34.124M	2713	2714	1468.1C	391	322	956
1244	203.9	205.3M	3.950L	3.936	34.162M	2715	2715	1468.9C	394	327	945
1244	207.4	208.9M	4.240L	4.225	34.206M	2715	2715	1470.2C	397	335	943
1244	211.1	212.6M	4.280L	4.264	34.224M	2716	2716	1470.5C	401	342	933
1244	217.3	218.8M	4.200L	4.184	34.227M	2717	2717	1470.2C	406	355	924
1244	218.4	219.9M	4.210L	4.194	34.290M	2722	2722	1470.4C	407	357	877
1244	219.3	220.9M	4.330L	4.314	34.272M	2719	2720	1470.9C	408	359	903
1244	224.8	226.4M	4.370L	4.353	34.323M	2723	2723	1471.2C	413	370	870
1244	232.8	234.4M	4.410L	4.393	34.363M	2726	2726	1471.5C	420	386	845
1244	244.7	246.5M	4.440L	4.422	34.393M	2728	2728	1471.9C	430	411	828
1244	250.2	252.0M	4.450L	4.431	34.417M	2730	2730	1472.1C	435	422	811
1244	268.6	270.5M	4.450L	4.430	34.456M	2733	2733	1472.4C	449	462	783

SECTION II

Description of the machine-generated data record

DESCRIPTION OF THE DATA RECORDS

GENERAL REMARKS

This Data Report contains oceanographic station data for the cruise indicated on the title page. The data have been edited and processed by CODC's OCEANS IV program, and are archived in our Oceanographic Station Data File. Copies of the data can be provided in computer-compatible form on card or magnetic tape. A description of the OCEANS IV program and/or an outline of available output formats are available upon request. (OCEANS IV; A Processing, Archiving and Retrieval System for Oceanographic Station Data).

Most entries in the observed portion of the Data Records can be accompanied by an error code or doubtful marker. Errors are indicated only if the entry is based on duplicate or multiplicate measurements and are coded A through I in multiples of the last digit shown in the printout (see Table 6).

The Data Records are broken into three "blocks": the station master, observed data, and interpolated data blocks. The station master contains the identification, position, time and bottom depth of the station plus meteorological data and some general information. In the observed data block the temperature and salinity observations and derived parameters such as sigma-t, specific volume anomaly, etc. are given. It may be followed or replaced by a second group of observed data containing all observed parameters but no derived quantities. The third block contains interpolated values of all parameters at specified depth or pressure levels. It also can be replaced or followed by a second group of interpolated data containing all observed parameters but no derived quantities. This data block is included in the listing only if specifically requested by the data originator.

Interpolations can be carried out to standard oceanographic depth or pressure levels (see Table 7) or to depth or pressure levels specified by the data originator. Both observed and derived parameters are interpolated individually, using the nearest two observations (or calculated values) above and below the desired interpolation levels. Two hyperbola are fitted to these points and a weighted mean is determined as described by Reiniger and Ross (1968)* or by Ratray (1962).** Linear interpolation is used in all cases when fewer than two points above and two below the required level are available. On page 1 the interpolation technique used is specified (if applicable).

*Deep Sea Res., 15, p 185 - 193

**Deep Sea Res., 9, p 25 - 37

EXPLANATION OF DATA RECORD HEADINGS

Insignificant trailing digits of any parameter can be left blank on the data entry forms, but will be shown as zeros in the listings of all data except temperature and salinity.

STATION MASTER HEADINGS

1. CRUISE NUMBER			2. STATION NUMBER		
3. LAT	7. YEAR	11. WAVE-P/H	15. WND-DIR	19. WW	21. COUN
4. LONG	8. MONTH	12. SWEL-P/H	16. WND-SPD	20. CLD-A	22. INST
5. DEPTH	9. DAY	13. SWEL-D	17. AIR-TEMP		23. RESTR
6. MARSD SO	10. H/M	14. BARO	18. WET BLB		24. UNAS

(1) CRUISE NUMBER	The first two digits indicate the year of the first station of the cruise; the next three digits are assigned consecutively by each institute commencing at 001 each year.
(2) CONSECUTIVE STATION NUMBER	Indicates the chronological order in which the stations are occupied.
(3) LATITUDE	Position of the platform at the sampling time in degrees and minutes with two decimals. Non-observed decimals are printed as zero's; e.g. observed latitudes of N36°25' and N36°25.00' will both be printed as N36 25.00.
(4) LONGITUDE	
(5) DEPTH	Bottom depth in metres with one decimal; adjusted for soundspeed as indicated on page 1.
(6) MARSDEN SQUARE	A code to designate the ten-degree square in which the samples have been taken (Figure 1).
(7) YEAR	Time-date group defining the moment at which the shallowest level is observed in GMT (Greenwich Mean Time).
(8) MONTH	
(9) DAY	
(10) HOUR and MINUTE	
(11) WAVE PERIOD and HEIGHT	Sea wave period in seconds (2 digits), followed by wave height (2 digits) in multiples of 0.5 metres; e.g. a wave height of 3 m is coded as 06.
(12) SWELL PERIOD and HEIGHT	See explanation of (11)
(13) SWELL DIRECTION	Direction <i>from</i> which swell waves are coming. A calm is indicated by 000, waves from due north by 360.
(14) BAROMETER	Air pressure in mbar with one decimal. Corrections for barometer height and/or outside air temperature have been applied as indicated on page 1.
(15) WIND DIRECTION	Direction <i>from</i> which the wind is blowing in degrees. A calm is indicated by 000, wind from due north by 360.
(16) WIND SPEED	Wind speed is given in m/sec; original observations made on the Beaufort scale are converted to metres per second according to the scale given in Table 1.
(17) AIR TEMPERATURE	In degrees Celsius with one decimal.
(18) WET BULB	
(19) WW CODE	Present weather in WMO code 4677 (Table 2)
(20) CLOUD AMOUNT	Sky coverage in eighths according to WMO code 2700 (Table 3)
(21) COUNTRY	Country in which the institute responsible for collecting the data is situated (Table 4).

(22) INSTITUTE	A code identifying the institute responsible for collecting the data (Table 5).
(23) RESTRICTION	If desired, a restriction can be placed on the data by inserting a numerical code. Blank or zero stand for unrestricted and non proprietary data.
(24) UNASSIGNED	In this field any alphanumeric information, entered in the corresponding field on the Data Summary form used to submit the data to CODC, is reproduced. It can, for example, be used to indicate an arbitrary station coding.

OBSERVED OR INTERPOLATED DATA;

1. GMT	2. DEPTH	3. PRESS	4. TEMP	5. POT.T
6. SAL	7. SGMT	8. SGPT	9. SOUND	10. GEOA
11. CHI	12. SVA	13. CHEMICAL PARAMETERS		

(1) GMT Time in GMT of in situ observation, e.g. time of reversal of a reversing thermometer. When a multiple cast is initiated prior to and continued after midnight, time may be indicated as 24, 25, 26, etc., hours plus up to 59 minutes. Note that the station date is determined by the date of the shallowest observed level.

(2) DEPTH Sample depth in metres with one decimal.

(3) PRESSURE Pressure at the sampling level, in dbar with one decimal, with reference to a surface pressure of zero. It may be followed by an "M" or a "C" to indicate whether pressure is measured or calculated from a depth observation.

(4) TEMPERATURE In degrees Celsius with three decimals, measured as indicated on page 1. It can be followed by one of the alphabetic doubtful data markers and error codes shown in Table 6, or by a "P" to indicate temperatures measured with an in situ probe.

(5) POTENTIAL TEMPERATURE Potential temperature is the temperature that a water sample would attain if raised adiabatically to the sea surface. It is defined by:

$$\Theta_i = T_i + \int_0^{P_i} \left(\frac{\partial T}{\partial p} \right)_\eta dp$$

where T_i is the in situ temperature, $\left(\frac{\partial T}{\partial p} \right)_\eta$ the derivate of temperature with respect to pressure under constant entropy, and P_i the pressure at the observed level. Θ_i is given in degrees Celsius with three decimals.

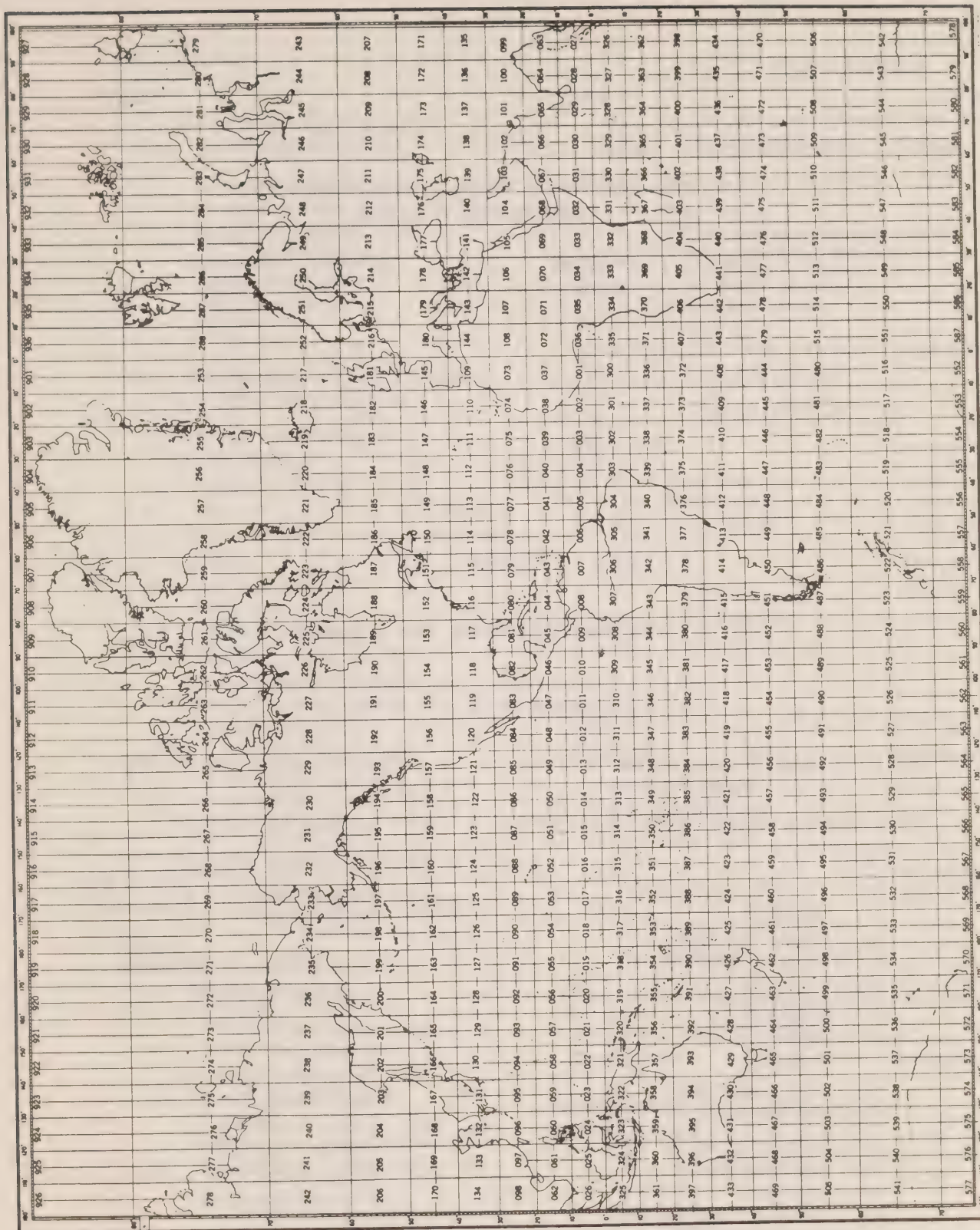
(6) SALINITY In parts per thousand (g/kg) with three decimals, measured as indicated on page 1. It may be followed by the alphabetic error codes shown in Table 6, or by a "P" to indicate salinities measured with an in situ probe.

(7) SIGMA-T The specific gravity anomaly, sigma-t, of seawater at atmospheric pressure is defined by:

$$\sigma_t = 1000 \times (\rho_{s,t,p=0} - 1.0)$$

where $\rho_{s,t,p=0}$ is the specific gravity of seawater as a function of salinity S, temperature T, and sea surface pressure. Sigma-t is given with two decimals; e.g. an entry of 2485 corresponds to $\sigma_t = 24.85$ or $\rho = 1.024,85$.

- (8) SIGMA POTENTIAL TEMPERATURE See definition of sigma-t, but substitute the potential temperature Θ for the in situ temperature T.
- (9) SOUNDSPEED Soundspeed is reported in m/sec with one decimal. It may be followed by an "M" or a "C" to indicate whether it is measured directly or calculated as a function of temperature, salinity and pressure using Wilson's equations.
- (10) GEOPOTENTIAL ANOMALY Geopotential anomaly is defined as:
- $$\Delta D = \int_0^P \delta \, dp$$
- where δ is specific volume anomaly. The integration over pressure is carried out either down to the pressure at the required depth level, or down to the required pressure level, as specified on page 1. The geopotential anomaly is expressed in dynamic metres (10^5 ergs/gram) with three decimals: a value of 0215 corresponds to $\Delta D = 0.215$ dynamic metres.
- (11) POTENTIAL ENERGY ANOMALY (CHI) Potential energy anomaly is defined by:
- $$\chi_\eta = \frac{1}{g} \int_0^{P(z_n)} p \, \delta \, dp$$
- where g is local gravity as a function of latitude and depth, p is pressure and δ the specific volume anomaly. It is expressed in units of 10^8 erg/cm² and recorded with two decimals, e.g. a value of 11644 corresponds to $\chi = 116.44 \times 10^8$ erg/cm².
- (12) SPECIFIC VOLUME ANOMALY The specific volume anomaly is defined by:
- $$\delta_{stp} = \alpha_{stp} - \alpha_{35, 0, p}$$
- where α_{stp} and $\alpha_{35, 0, p}$ are the specific volume at the in situ salinity, temperature and pressure, or a standard salinity of 35.00/00, standard temperature of 0°C, and in situ pressure respectively, δ is expressed in 10^5 ml/gr with one decimal place; e.g. a reading of 1234 corresponds to $\delta = 123.4 \times 10^{-5}$ ml/gr.
- (13) OXY Dissolved oxygen in ml/l with two decimals.
- (14) PO₄ Phosphate-phosphorus in μ g-atoms per litre with two decimals.
- (15) T-P Total phosphorus in μ g-atom per litre with two decimals.
- (16) NO₂ Nitrate-nitrogen in μ g-atom per litre with two decimals.
- (17) NO₃ Nitrate-nitrogen in μ g-atom per litre with one decimal.
- (18) SI Silicate-silicon in μ g-atom per litre with one decimal.
- (19) pH The pH value with three decimals.
- (20) F Fluoride in mg/l with two decimals.
- (21) D.C. Dissolved organic carbon in mg/l with two decimals.
- (22) P.C. Particulate organic carbon in mg/m³ with zero decimals.
- (23) T ALK Total alkalinity in micro-equivalents per litre with zero decimals.
- (24) C ALK Carbonate alkalinity in micro-equivalents per litre with zero decimals.
- (25) NH₃ Ammonia in micrograms NH₃ per litre with two decimals.



MARSDEN SQUARE CHART

CODE TABLES

TABLE 1

CONVERSION OF BEAUFORT ESTIMATE TO
WINDSPEED IN M/SEC

Beaufort	Windspeed in m/sec	Beaufort	Windspeed in m/sec
0	00	7	15
1	01	8	19
2	02	9	22
3	04	10	26
4	07	11	30
5	09	12	34
6	12		

TABLE 2

PRESENT WEATHER (ww — Code)

Use the highest code figure applicable except that 17
has preference over 20 to 49 inclusive.

00—49 NO PRECIPITATION AT SHIP AT TIME
OF OBSERVATION

00—03 CHANGE OF SKY DURING PAST HOUR

Code

- 00 Cloud development not observable
- 01 Clouds dissolving or becoming less developed
- 02 State of sky on the whole unchanged
- 03 Clouds generally forming or developing

04—09 SMOKE, HAZE, SAND OR DUST

- 04 Visibility reduced by smoke (not ship's smoke)
- 05 Dry Haze
- 06 Widespread dust suspended in air
- 07 Blowing spray at ship
- 08 Dust whirls in past hour (not for marine use)
- 09 Dust or sandstorm in sight, or at ship in past hour

10—12 MIST AND SHALLOW FOG

Code

- 10 Mist (visibility 1100 yds. or more)
 - 11 Shallow fog in patches
 - 12 Shallow fog—more or less continuous
- Fog not deeper than 33 ft.*

13—16 PHENOMENA WITHIN SIGHT
BUT NOT AT SHIP

- 13 Lightning visible, no thunder heard
- 14 Precipitation in sight, not reaching surface
- 15 Precip. beyond 3 naut. miles, reaching surface
- 16 Precip. within 3 naut. miles, reaching surface

Table 2 (cont'd.)

Code			Code			Code		
17-19 THUNDER, SQUALLS, FUNNEL CLOUDS			Sky Visible	Visibility less than 1100 yards of time of observation		Sky Invisible		
17	Thunder at time of obsn. — no precip. at ship		42	Fog, has become thinner in past hour		43		
18	Squalls (no precip.) in past hour or at time of obsn.		44	Fog, no change in past hour		45		
19	Funnel cloud(s) seen in past hour or at time of obsn.		46	Fog, has begun or thickened in past hour		47		
			48	Fog, depositing rime		49		
20-29 PHENOMENA IN PAST HOUR BUT NOT AT TIME OF OBSN.			50-99 PRECIPITATION AT SHIP AT TIME OF OBSERVATION					
20	Drizzle (not freezing) or snow grains] <i>Not falling as showers</i>	50-59 DRIZZLE					
21	Rain (not freezing)		Intermittent			Continuous		
22	Snow		50	Slight Drizzle		51		
23	Rain and snow, or ice pellets		52	Moderate Drizzle		53		
24	Freezing drizzle or freezing rain		54	Heavy Drizzle		55		
25	Shower(s) of rain		Slight			Moderate or Heavy		
26	Shower(s) of snow, or of rain and snow mixed		56	Freezing drizzle		57		
27	Shower(s) of hail*, or of rain and hail* mixed		58	Drizzle and rain mixed		59		
28	Fog (in past hour but not at time of observation)		60-69 RAIN (NOT FALLING AS SHOWERS)					
29	Thunderstorm, with or without precipitation		Intermittent			Continuous		
*Includes hail, ice pellets, or snow pellets			60	Slight rain		61		
			62	Moderate rain		63		
			64	Heavy rain		65		
			Slight			Moderate or Heavy		
30-39 (Not likely to be used in ship reports)			66	Freezing rain		67		
			68	Rain or drizzle with snow		69		
Slight or Moderate		Heavy	70-79 SOLID PRECIPITATION NOT FALLING AS SHOWERS					
30	Duststorm or sandstorm, decreasing	33	Intermittent			Continuous		
31	Duststorm or sandstorm, unchanging	34	70	Slight snow in flakes		71		
32	Duststorm or sandstorm, increasing	35	72	Moderate snow in flakes		73		
36	Drifting snow, generally low	37	74	Heavy snow in flakes		75		
38	Blowing snow, generally high	39	76	Ice prisms (with or without fog)				
40-49 FOG AT THE TIME OF OBSERVATION			77	Snow grains (with or without fog)				
40	Fog at a distance but not at ship during past hour		78	Isolated starlike snow crystals (with or without fog)				
41	Fog in patches		79	Ice pellets				

Table 2 (cont'd.)

Code		Code		Code	
	80–84 RAIN SHOWERS			91–94 THUNDERSTORM DURING THE PAST HOUR BUT NOT AT THE TIME OF OBSERVATION	
80	Slight rain shower				
81	Moderate or heavy rain shower				
82	Violent rain shower				
83	Shower of rain and snow mixed, slight				
84	Shower of rain and snow mixed, moderate or heavy				
	85–90 SOLID PRECIPITATION IN SHOWERS				
	Slight		Moderate or Heavy		
85	Shower of snow	86		91	Slight rain
87	Shower of snow pellets or ice pellets*	88		92	Moderate or heavy rain
89	Shower of hail, no thunder	90		93	Slight snow, or rain and snow mixed, or hail*
	With or without rain and/or snow			94	Moderate or heavy snow, or rain and snow mixed, or hail
					<i>Thunderstorm in past hour but not now – precip. occurring at time of obsn.</i>
					*Includes hail, ice pellets or snow pellets
				95–99 THUNDERSTORM AT TIME OF OBSERVATION	
				95	Slight or modt. thunderstorm with rain and/or snow, but no hail*
				96	Slight or modt. thunderstorm with hail*
				97	Heavy thunderstorm with rain and/or snow, no hail*
				98	Thunderstorm with dust or sandstorm
				99	Heavy thunderstorm with hail*
					*Includes hail, ice pellets or snow pellets

TABLE 3

CLOUD AMOUNT (N — Code)

Fraction of the sky covered by clouds

Code	Cloud Cover	Code	Cloud Cover
0	Cloudless	6	6/8
1	1/8 or less but not zero	7	7/8 or more but not 8/8
2	2/8	8	8/8, sky totally covered
3	3/8	9	Sky obscured by dense fog, heavy snow, etc., or amount cannot be estimated.
4	4/8		
5	5/8		

TABLE 4

COUNTRY CODES (abbreviated table)

Complete table see OCEANS IV Systems' Description.

06 Germany	46 Iceland
09 Australia	49 Japan
18 Canada	58 Norway
26 Denmark	64 Netherlands
31 United States	74 United Kingdom
35 France	90 Union of Soviet Socialist Republics

TABLE 5

INSTITUTE CODES

01 Marine Ecology Laboratory, Bedford Institute	14 Institute of Oceanography, Dalhousie University
02 Pacific Oceanographic Group	15 Marine Sciences Branch, Pacific Region
03 Biological Station, St. Andrews, N.B.	16 Department of Transport
04 Arctic Biological Station, Ste. Anne de Bellevue, P.Q.	17 Marine Sciences Centre, McGill University
05 Biological Station, St. John's Nfld.	18 Canadian Forces Maritime Command, East Coast
06 Station de Biologie Marine, Grande Rivière	19 Canadian Forces Maritime Command, West Coast
07 Marine Sciences Branch, Central Region	20 Ontario Water Resources Commission
08 Defence Research Establishment, Atlantic	21 Dept. of National Health and Welfare
09 Defence Research Establishment, Pacific	22 Inland Waters Branch, Dept. of Energy, Mines and Resources
10 Atlantic Oceanographic Laboratory, Bedford Institute	23 Arctic Institute of North America
11 Polar Continental Shelf Project	
12 Great Lakes Institute	
13 Institute of Oceanography, University of British Columbia	

TABLE 6
DOUBTFUL DATA MARKERS AND ERROR CODES

Code	Explanation
X	Considered doubtful by the data originator.
Y	Considered doubtful by CODC.
A I	Error estimates coded as shown below. The codes are used only as a measure of the spread between duplicate or multiplicate measurements at the same location and time.

Let P be the difference between two measurements. P is then coded in multiples of the last digit allowed for on the coding form as follows:

$P \leq 1$	Code A
$1 < P \leq 2$	Code B
$2 < P \leq 5$	Code C
$5 < P \leq 10$	Code D
$10 < P \leq 20$	Code E
$20 < P \leq 50$	Code F
$50 < P \leq 100$	Code G
$100 < P \leq 200$	Code H
$200 < P$	Code I

A temperature error $P=0.003^{\circ}\text{C}$ is coded as C, an error $P=0.02^{\circ}\text{C}$ as E, and a salinity error $P=0.08$ per mille as G, etc.

If the datum is based on a triple measurement, P is taken equal to the standard deviation:

$$P = \left\{ \frac{1}{2} \sum_{i=1}^3 (A_i - \bar{A})^2 \right\}^{1/2}$$

where A_i are the measurements and \bar{A} the mean value of the observed parameter.

- | | |
|---|---|
| W | Appears only with interpolated data, and indicates that linear interpolation has been used instead of hyperbolic. |
| P | This is not an error code; it indicates data sampled with an in-situ probe. |

TABLE 7

STANDARD LEVELS

0000	0200	1200	5500
0010	0225	1500	6000
0020	0250	2000	6500
0030	0300	2500	7000
0050	0400	3000	7500
0075	0500	3500	8000
0100	0600	4000	8500
0125	0700	4500	9000
0150	0800	5000	9500
0175	1000		

Note: The standard levels can refer to standard depths or to standard pressure levels as indicated on page 1.

SECTION III

Bottle station data

GENERAL INFORMATION ON THE CRUISE

CODC Cruise Identification (country, inst., crn.): 1810-69051 (Stations 001-004)
 Originating Institute: Atlantic Oceanographic Laboratory, Bedford Institute
 Originator's Cruise Number (if applicable): BI 69-051
 Area: St. Lawrence Estuary
 Observation Platform: C.S.S. Dawson
 Period: 17-21 September, 1969

PARAMETERS MEASURED

1	Temperature	9
2	Salinity	10
3		11
4		12
5		13
6		14
7		15
8		16

METHODS USED

Sea Surface Temperature

☐ Same as Subsurface
☒ Bucket
☐ Water Intake
☐ Tow Frame

Sub Surface Temperature

☒ Reversing Thermometer
☐ Thermal Probe

Salinity

☐ Titration
☐ Conductance
☒ Inductance
☐ Refrac. Index
☐ In Situ Probe
☐ Hydrometer

Oxygen

☐ Winkler
☐ In Situ Probe

Anemometer Height in M Above Sea Level: 25

Sounding Corrections Applied

☒ Soundspeed of 1463 m/sec
☐ Soundspeed of 1500 m/sec
☐ Matthews Tables
☐ Measured or Calculated In Situ
 Soundspeed Profile

Air Pressure

☐ Barometer Reading Uncorrected
☒ Corrected for Barometer Height
☐ Corrected For Bar. Height and
 Outside Air Temperature

INTERPOLATION

Interpolation Technique

☐ Rattray
☒ Reiniger and Ross

Interpolation to "Standard" Levels of:

☐ Depth
☒ Pressure

CRUISE NUMBER 69051 STATION NUMBER 001

LAT	N48 54.00	YEAR	1969	WAVE-P/H	WIND-DIR	WW	COUN	18
LONG	W 68 6.00	MONTH	9	SWEL-P/H	WIND-SPD	CLD-A	INST	10
DEPTH	322.0	DAY	20	SWEL-D	AIR-TEM		RESTR	
MARSD	SQ 151	H/M	0822	BARO	WET-BLB		UNAS	WDF1

O B S E R V E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
0822	0.0	0.0C	6.60 D	6.600	27.165B	2134	2134	1467.2C	0	0	6466
0822	10.0	10.1C	6.31 D	6.309	27.716B	2180	2180	1466.9C	63	3	6020
0822	20.0	20.2C	5.48 D	5.478	29.194B	2306	2306	1465.6C	118	12	4821
0822	40.0	40.3C	2.85 D	2.848	31.360B	2502	2502	1457.7C	195	34	2948
0822	60.0	60.5C	0.60 D	0.598	32.021B	2570	2570	1448.9C	246	61	2300
0822	80.0	80.6C	0.62 D	0.617	32.299B	2592	2592	1449.7C	290	92	2089
0822	100.0	100.8C	1.03 D	1.026	32.687B	2621	2621	1452.4C	330	129	1817
0822	120.0	121.0C	1.58 D	1.574	33.044B	2646	2646	1455.7C	364	167	1581
0822	140.0	141.1C	2.24 D	2.232	33.433B	2672	2672	1459.5C	393	206	1336
0822	160.0	161.3C	2.64 D	2.631	33.681B	2689	2689	1461.9C	419	245	1183
0822	200.0	201.6C	3.22 D	3.207	34.012B	2710	2710	1465.5C	462	325	986
0822	240.0	242.0C	3.60 D	3.584	34.232B	2724	2724	1468.1C	499	409	861
0822	300.0	302.5C	3.92 D	3.898	34.391B	2733	2733	1470.6C	549	546	779

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	0.0	0.0	6.600	6.600	27.165	2134	2134	1467.2	0	0	6466
	9.9	10.0	6.313W	6.312	27.711W	2180	2180	1466.9W	62	3	6024
	19.8	20.0	5.501A	5.499	29.166B	2304	2304	1465.6A	117	12	4844
	29.8	30.0	4.150C	4.147	30.421D	2417	2417	1462.0B	160	22	3757
	49.6	50.0	1.663F	1.661	31.677W	2549	2549	1453.5A	222	46	2500
	74.4	75.0	0.557E	0.554	32.213C	2585	2585	1449.2A	278	83	2152
	99.2	100.0	1.011A	1.007	32.672A	2620	2620	1452.3A	329	128	1827
	124.0	125.0	1.703B	1.697	33.119A	2651	2651	1456.4A	370	175	1533
	148.8	150.0	2.446C	2.437	33.557B	2680	2680	1460.7A	405	223	1259
	173.6	175.0	2.866B	2.856	33.815B	2698	2698	1463.3A	435	272	1102
	198.4	200.0	3.201A	3.188	34.001A	2709	2709	1465.4A	460	322	992
	223.2	225.0	3.461B	3.447	34.152A	2719	2719	1467.1A	484	373	906
	247.9	250.0	3.642W	3.626	34.253W	2725	2725	1468.4W	506	427	850
	297.5	300.0	3.907W	3.885	34.384W	2733	2733	1470.5W	547	540	782

CRUISE NUMBER 69051 STATION NUMBER 002

LAT	N48 44.50	YEAR	1969	WAVE-P/H	WIND-DIR	WW	COUN	18
LONG	W 68 32.00	MONTH	9	SWEL-P/H	WIND-SPD	CLD-A	INST	10
DEPTH	355.0	DAY	20	SWEL-D	AIR-TEM		RESTR	
MARSD	SQ 151	H/M	1553	BARO	WET-BLB		UNAS	WDF3

O B S E R V E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
1553	0.0	0.0C	6.80 D	6.800	26.990B	2118	2118	1467.8C	0	0	6621
1553	10.0	10.1C	6.22 D	6.219	27.363B	2154	2154	1466.1C	65	3	6276
1553	20.0	20.2C	5.80 D	5.798	28.575B	2253	2253	1466.1C	124	12	5320
1553	40.0	40.3C	2.66 D	2.658	31.210B	2492	2492	1456.6C	208	37	3048
1553	60.0	60.5C	0.68 D	0.678	31.978B	2566	2566	1449.2C	262	65	2337
1553	80.0	80.6C	1.17 D	1.167	32.788B	2628	2628	1452.9C	303	94	1749
1553	100.0	100.8C	1.67 D	1.665	33.093B	2649	2649	1455.8C	336	124	1551
1553	120.0	121.0C	2.08 D	2.074	33.336B	2666	2666	1458.3C	366	158	1396
1553	140.0	141.1C	2.50 D	2.492	33.619B	2685	2685	1460.9C	392	193	1216
1553	160.0	161.3C	3.06 D	3.050	33.934B	2705	2705	1464.0C	415	228	1028
1553	200.0	201.6C	3.43 D	3.417	34.132B	2717	2718	1466.6C	454	299	916
1553	240.0	242.0C	3.74 D	3.723	34.296B	2727	2728	1468.8C	489	378	826
1553	300.0	302.5C	3.88 D	3.859	34.373B	2732	2732	1470.4C	537	513	788

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	0.0	0.0	6.800	6.800	26.990	2118	2118	1467.8	0	0	6621
	9.9	10.0	6.226W	6.225	27.359W	2154	2154	1466.1W	64	3	6279
	19.8	20.0	5.814B	5.812	28.550A	2251	2251	1466.1W	123	12	5341
	29.8	30.0	4.160F	4.158	29.860W	2363	2363	1461.5W	170	23	4269
	49.6	50.0	1.422E	1.421	31.579W	2531	2531	1452.5B	238	50	2673
	74.4	75.0	1.032C	1.030	32.564D	2614	2614	1451.9A	293	86	1879
	99.2	100.0	1.651A	1.646	33.082A	2648	2648	1455.7A	335	123	1558
	124.0	125.0	2.162A	2.156	33.389A	2670	2670	1458.8A	371	165	1362
	148.8	150.0	2.732C	2.723	33.756B	2694	2694	1462.2A	402	208	1133
	173.6	175.0	3.208E	3.198	34.014D	2710	2711	1465.0A	429	252	982
	198.4	200.0	3.417A	3.404	34.125A	2717	2718	1466.5A	453	296	920
	223.2	225.0	3.631A	3.615	34.237A	2723	2724	1468.0A	475	344	858
	247.9	250.0	3.759W	3.741	34.306W	2728	2729	1469.0W	495	396	821
	297.5	300.0	3.874W	3.853	34.370W	2732	2732	1470.3W	535	507	790

CRUISE NUMBER 69051 STATION NUMBER 003

LAT	N48 35.00	YEAR	1969	WAVE-P/H	WIND-DIR	WW	COUN	18
LONG W	68 51.00	MONTH	9	SWEL-P/H	WIND-SPD	CLD-A	INST	10
DEPTH	320.0	DAY	20	SWEL-D	AIR-TEM		RESTR	
MARSD SQ	151	H/M	1937	BARO	WET-BLB		UNAS	WDF5

O B S E R V E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
1937	0.0	0.0C	4.90 D	4.900	28.347B	2245	2245	1461.8C	0	0	5402
1937	10.0	10.1C	3.82 D	3.819	28.773B	2288	2288	1457.9C	52	3	4984
1937	20.0	20.2C	3.21 D	3.209	29.587B	2358	2358	1456.5C	100	10	4319
1937	40.0	40.3C	2.15 D	2.148	31.255B	2499	2499	1454.5C	172	32	2977
1937	60.0	60.5C	1.16 D	1.157	32.077H	2571	2571	1451.5C	225	58	2289
1937	80.0	80.6C	0.95 D	0.947	32.658B	2619	2619	1451.7C	266	88	1834
1937	100.0	100.8C	1.53 D	1.525	32.998B	2643	2643	1455.1C	301	120	1613
1937	120.0	121.0C	2.04 D	2.034	33.331B	2666	2666	1458.1C	331	154	1396
1937	140.0	141.1C	2.37 D	2.362	33.536B	2679	2679	1460.2C	358	190	1269
1937	160.0	161.3C	2.63 D	2.621	33.674B	2688	2688	1461.8C	383	228	1187
1937	200.0	201.6C	3.20 D	3.187	34.009B	2710	2710	1465.4C	426	308	987
1937	240.0	242.0C	3.51 D	3.494	34.182B	2721	2721	1467.6C	464	393	889
1937	300.0	302.5C	3.86 D	3.839	34.366B	2732	2732	1470.4C	515	534	791

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	0.0	0.0	4.900	4.900	28.347	2245	2245	1461.8	0	0	5402
	9.9	10.0	3.831W	3.830	28.769W	2288	2288	1457.9W	51	3	4988
	19.8	20.0	3.221A	3.220	29.571A	2357	2357	1456.5A	99	10	4332
	29.8	30.0	2.670B	2.669	30.395D	2427	2427	1455.5A	139	20	3666
	49.6	50.0	1.655D	1.653	31.650W	2541	2541	1453.2A	200	44	2574
	74.4	75.0	0.930A	0.927	32.520A	2605	2608	1451.3A	256	79	1937
	99.2	100.0	1.503A	1.503	32.985A	2642	2642	1455.0A	300	119	1622
	124.0	125.0	2.117B	2.111	33.380A	2669	2669	1458.6A	337	161	1365
	148.8	150.0	2.483B	2.475	33.595A	2683	2683	1460.9A	369	207	1234
	173.6	175.0	2.816A	2.806	33.780B	2695	2695	1463.0A	399	255	1124
	198.4	200.0	3.181A	3.168	33.998A	2709	2709	1465.3A	424	305	993
	223.2	225.0	3.393C	3.384	34.121C	2717	2717	1466.8A	449	356	922
	247.9	250.0	3.556W	3.540	34.206W	2722	2722	1468.0W	471	412	876
	297.5	300.0	3.846W	3.825	34.358W	2732	2732	1470.3W	513	528	795

CRUISE NUMBER 69051 STATION NUMBER 004

LAT	N48 24.00	YEAR	1969	WAVE-P/H	WIND-DIR	WW	COUN	18
LONG	W 69 8.00	MONTH	9	SWEL-P/H	WIND-SPD	CLD-A	INST	10
DEPTH	300.0	DAY	20	SWEL-D	AIR-TEM		RESTR	
MARSD SQ	151	H/M	2233	BARO	WET-BLB		UNAS	WDF7

O B S E R V E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
2233	0.0	0.0C	5.70 D	5.700	28.859B	2277	2277	1465.8C	0	0	5095
2233	10.0	10.1C	3.76 D	3.759	29.382B	2337	2337	1458.5C	49	2	4518
2233	20.0	20.2C	2.71 D	2.709	30.292B	2418	2418	1455.3C	90	9	3747
2233	40.0	40.3C	2.04 D	2.038	31.294B	2503	2503	1454.0C	157	29	2939
2233	60.0	60.5C	1.29 D	1.287	32.099B	2572	2572	1452.1C	209	56	2280
2233	80.0	80.6C	1.51 D	1.506	32.892B	2634	2634	1454.5C	249	84	1692
2233	100.0	100.8C	2.15 D	2.145	33.354B	2667	2667	1458.3C	280	112	1388
2233	120.0	121.0C	2.44 D	2.433	33.564B	2681	2681	1460.2C	306	142	1251
2233	140.0	141.1C	2.56 D	2.552	33.629B	2685	2685	1461.1C	331	175	1213
2233	170.0	171.4C	2.91 D	2.900	33.822B	2698	2698	1463.4C	366	231	1099
2233	200.0	201.6C	3.29 D	3.277	34.047B	2712	2712	1465.8C	397	290	967
2233	250.0	252.1C	3.63 D	3.613	34.231B	2723	2724	1468.4C	443	396	865
2233	290.0	292.5C	3.79 D	3.770	34.327B	2729	2730	1469.8C	477	490	812

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	0.0	0.0	5.700	5.700	28.859	2277	2277	1465.8	0	0	5095
	9.9	10.0	3.779W	3.778	29.377W	2336	2336	1458.6W	49	2	4524
	19.8	20.0	2.724A	2.723	30.276A	2417	2417	1455.3A	89	9	3761
	29.8	30.0	2.385E	2.383	30.781W	2464	2464	1454.7A	125	18	3308
	49.6	50.0	1.683D	1.680	31.683B	2538	2538	1453.1A	184	42	2605
	74.4	75.0	1.383D	1.379	32.674C	2620	2620	1453.6A	239	76	1827
	99.2	100.0	2.131A	2.126	33.341A	2666	2666	1458.2A	279	111	1397
	124.0	125.0	2.473C	2.466	33.582C	2682	2682	1460.4A	311	148	1241
	148.8	150.0	2.649C	2.641	33.674A	2688	2688	1461.7A	342	191	1186
	173.6	175.0	2.954A	2.944	33.847A	2700	2700	1463.7A	370	238	1084
	198.4	200.0	3.273A	3.260	34.037A	2711	2711	1465.7A	395	287	973
	223.2	225.0	3.492B	3.477	34.153C	2718	2719	1467.2A	419	338	908
	247.9	250.0	3.619A	3.602	34.225A	2723	2724	1468.3A	441	391	868

SECTION IV

STD station data

GENERAL INFORMATION ON THE CRUISE

CODC Cruise Identification (country, inst., crn.): 1810-69051 (Stations 005-122)
 Originating Institute: Atlantic Oceanographic Laboratory, Bedford Institute
 Originator's Cruise Number (if applicable): BI 69-051
 Area: Gulf of St. Lawrence
 Observation Platform: C.S.S. "Dawson"
 Period: 21 September - 7 October, 1969,

PARAMETERS MEASURED

1	Temperature	9
2	Salinity	10
3		11
4		12
5		13
6		14
7		15
8		16

METHODS USED

Sea Surface Temperature

- ☒ Same as Subsurface
☐ Bucket
☐ Water Intake
☐ Tow Frame

Oxygen

- ☐ Winkler
☐ In Situ Probe

Sub Surface Temperature

- ☐ Reversing Thermometer
☒ Thermal Probe

Salinity

- ☐ Titration
☐ Conductance
☐ Inductance
☐ Refrac. Index
☒ In Situ Probe
☐ Hydrometer

Anemometer Height in M Above Sea Level: 25

Sounding Corrections Applied

- ☒ Soundspeed of 1463 m/sec
☐ Soundspeed of 1500 m/sec
☐ Matthews Tables
☐ Measured or Calculated In Situ
 Soundspeed Profile

Air Pressure

- ☐ Barometer Reading Uncorrected
☒ Corrected for Barometer Height
☐ Corrected For Bar. Height and
 Outside Air Temperature

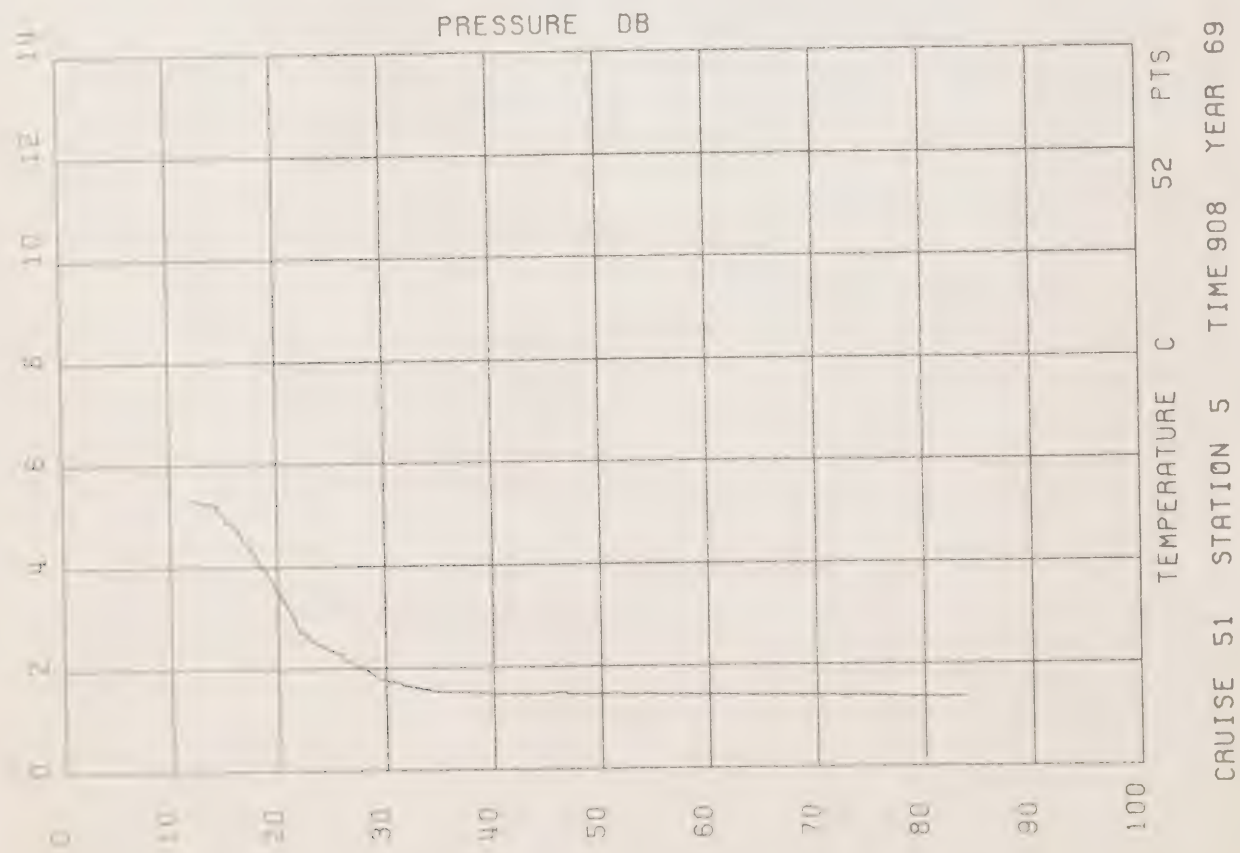
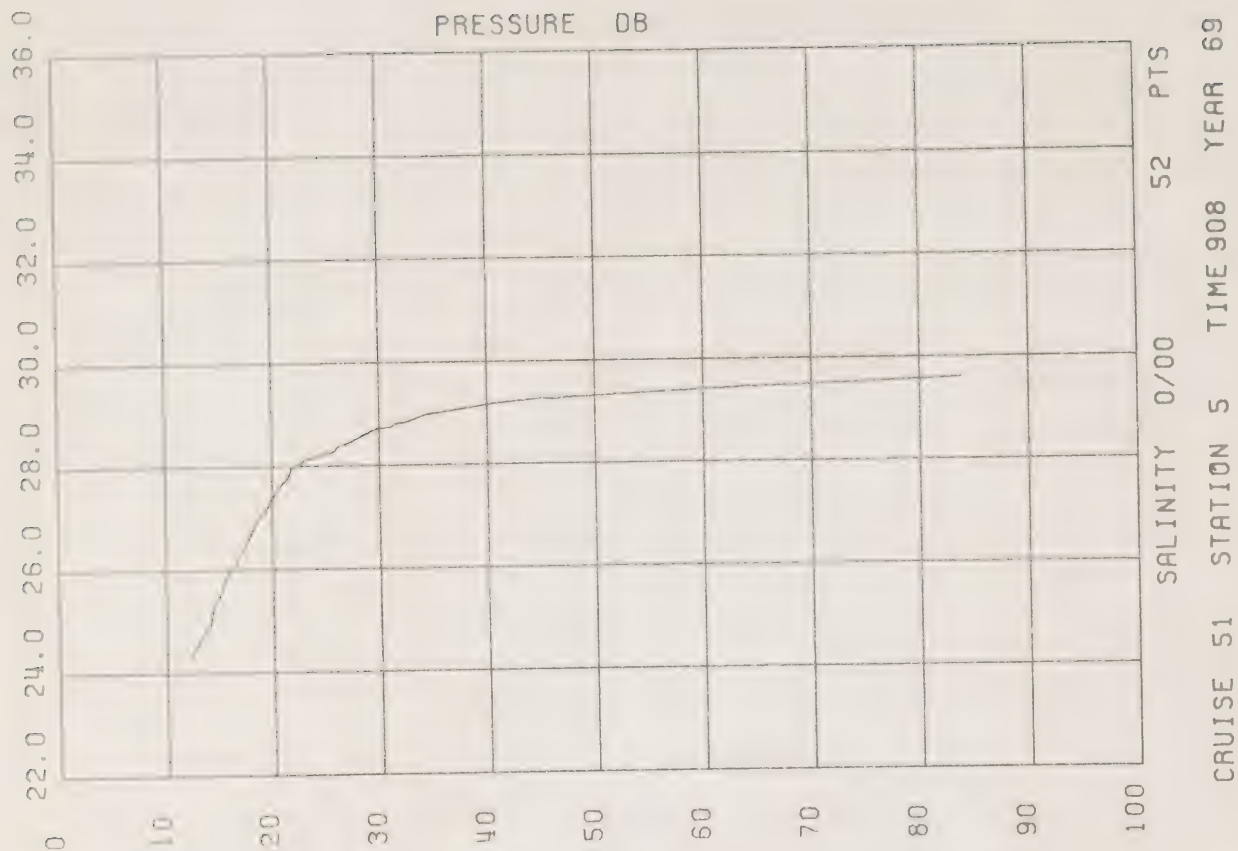
INTERPOLATION

Interpolation Technique

- ☐ Rattray
☒ Reiniger and Ross

Interpolation to "Standard" Levels of:

- ☒ Depth
☐ Pressure



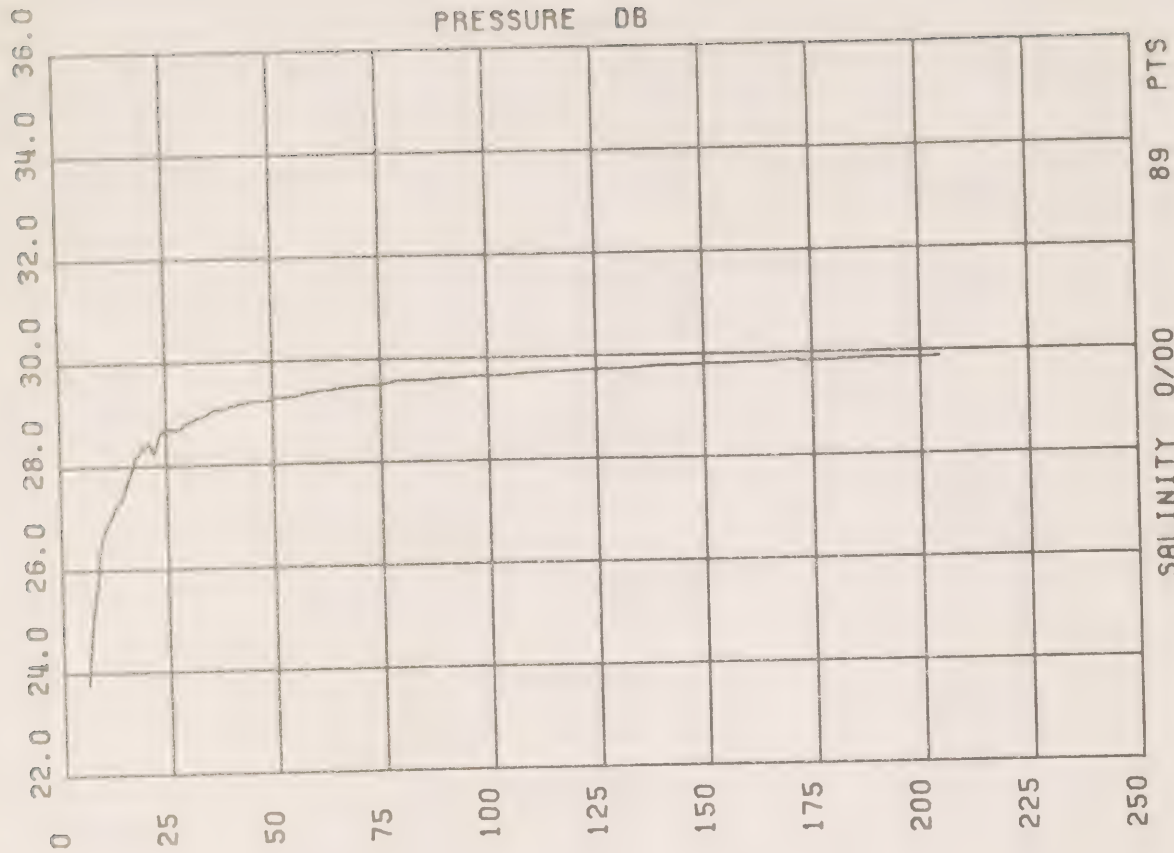
CRUISE NUMBER 69051 STATION NUMBER 005

LAT	N48	24.60	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 70	50.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		86.0	DAY	22	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	0910	BARO	WET-BLB	UNAS	SR01

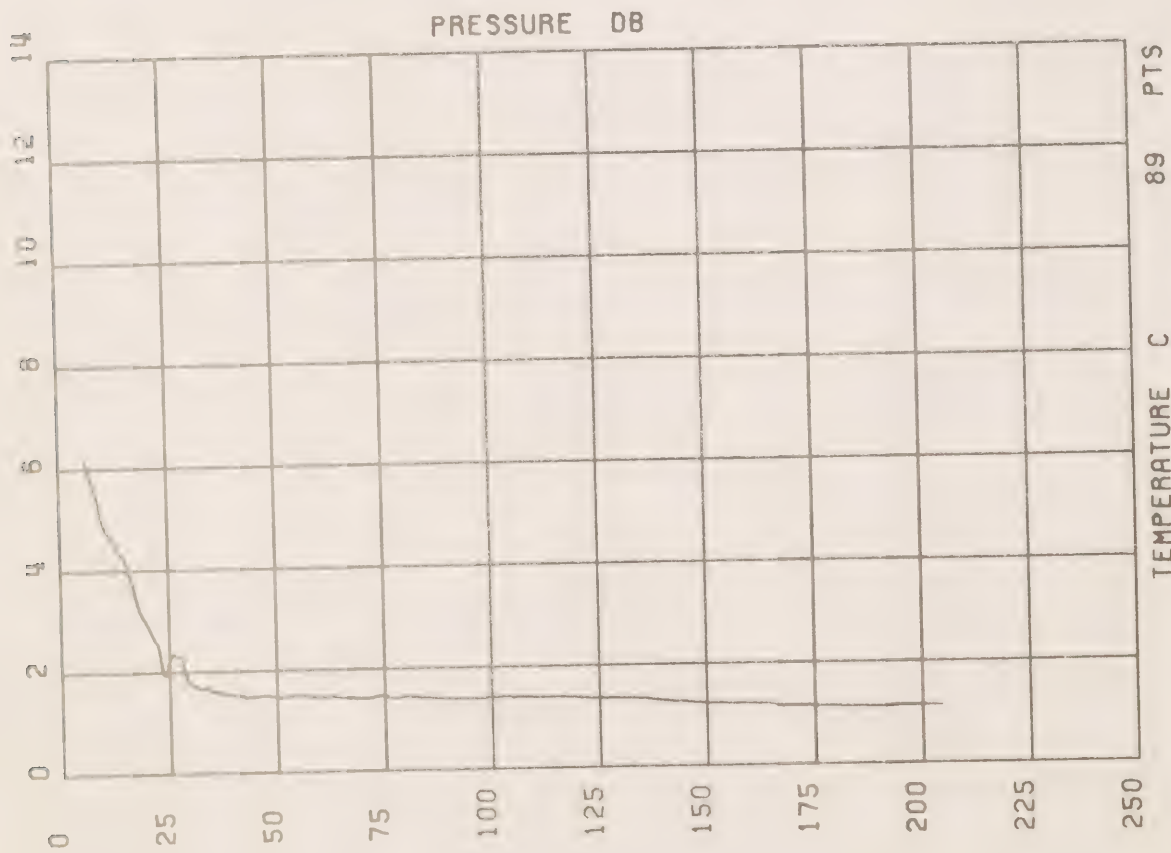
WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	20.0	20.2A	3.449A	3.448	27.448A	2187	2187	1454.7A	58	10	5959
	30.0	30.2A	1.747A	1.746	28.734A	2300	2300	1449.1A	111	23	4869
	50.0	50.4	1.470	1.468	29.318	2349	2349	1449.0	203	61	4408
	75.0	75.5	1.390	1.387	29.537	2367	2367	1449.3	311	130	4235



CAUISE 51	STATION 6	TIME 1013	YEAR 69
SALINITY	0/00	89	PTS



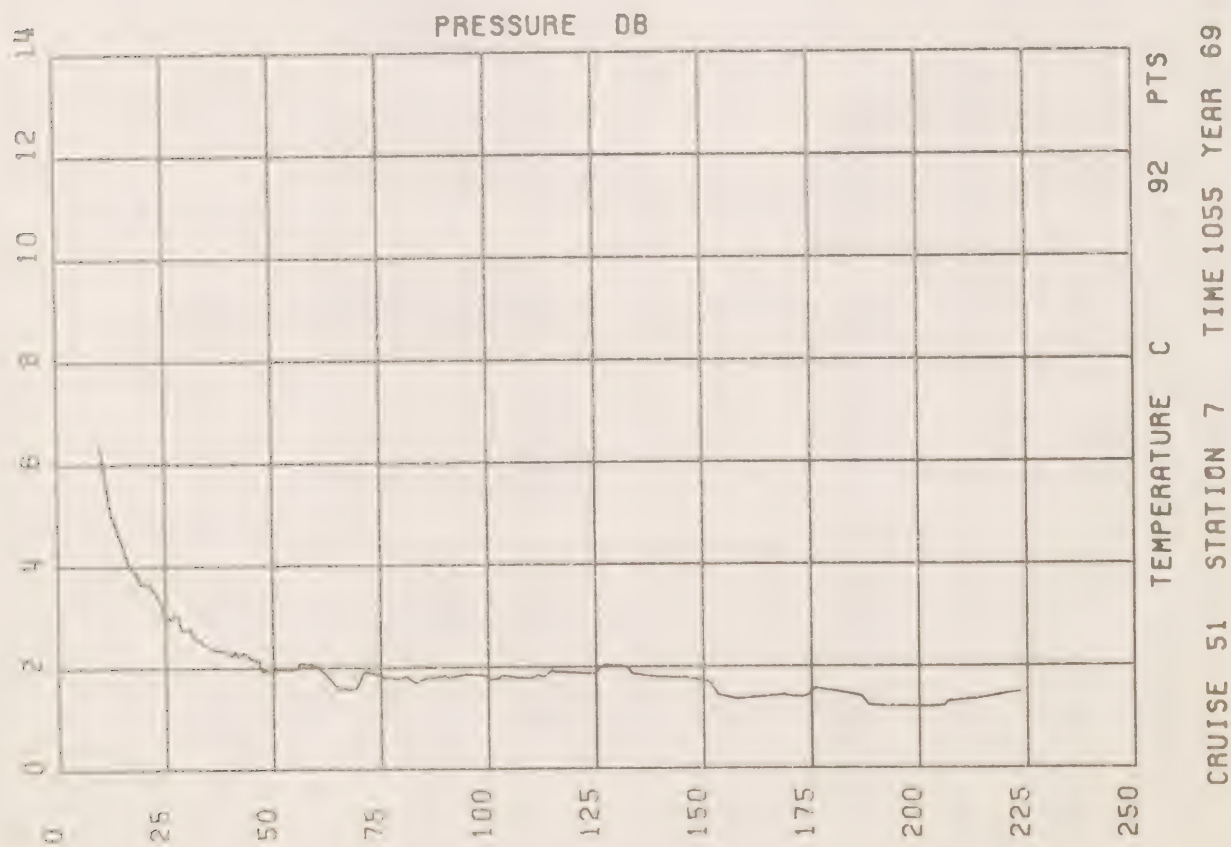
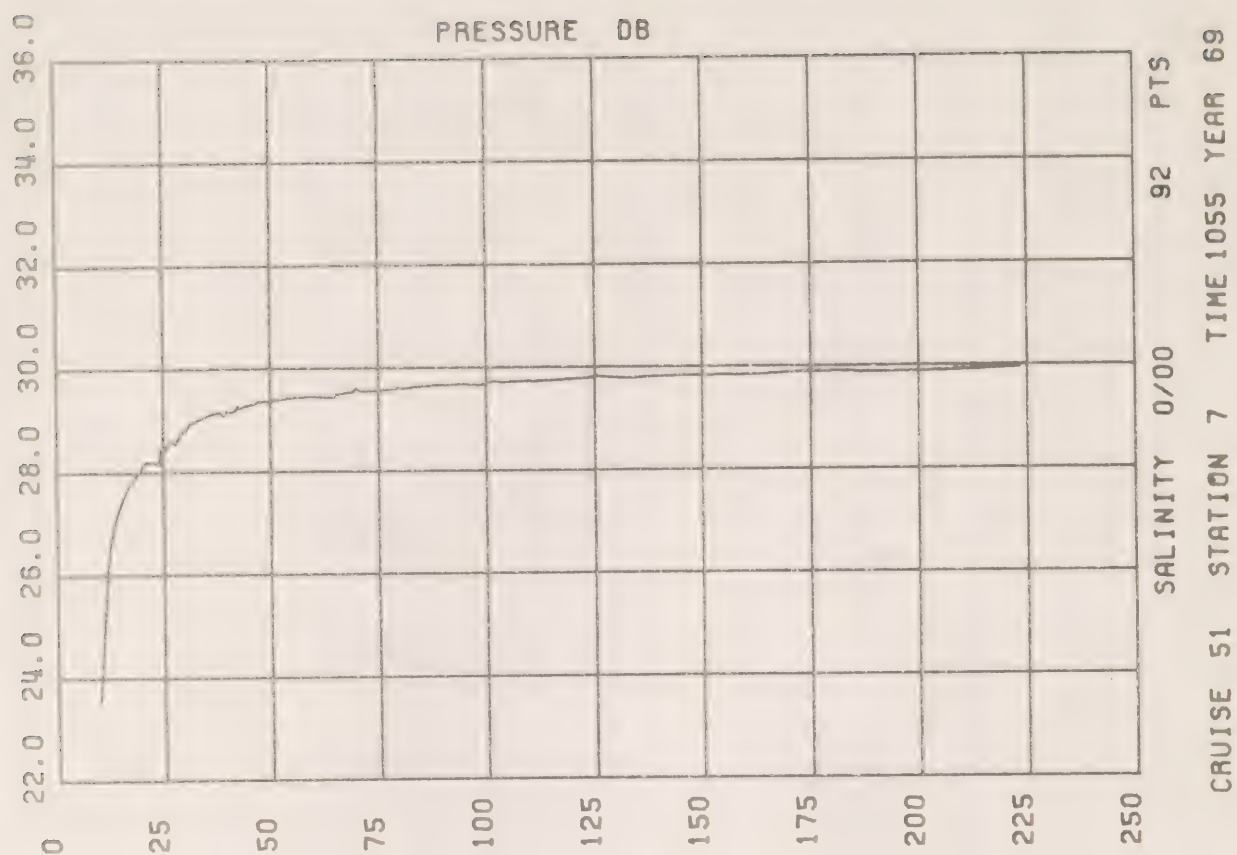
CRUISE 51	STATION 6	TEMPERATURE C	89	PTS
				TIME 1013 YEAR 69

CRUISE NUMBER 69051 STATION NUMBER 006

LAT	N48	22.10	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 70	34.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		230.0	DAY	22	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	1007	BARO	WET-BLB	UNAS	SR02

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	4.804A	4.803	26.737A	2118	2118	1459.4A	33	3	6610
	20.0	20.2A	2.817A	2.816	28.398A	2266	2266	1453.2A	92	12	5193
	30.0	30.2A	1.737W	1.736	28.829A	2308	2308	1449.2W	142	25	4795
	50.0	50.4A	1.461W	1.459	29.286A	2346	2346	1448.9W	235	62	4433
	75.0	75.5	1.450	1.447	29.517	2365	2365	1449.5	344	132	4254
	100.0	100.7A	1.390A	1.386	29.637A	2375	2375	1449.8W	449	226	4158
	125.0	125.9A	1.345W	1.340	29.744A	2384	2384	1450.2W	554	347	4073
	150.0	151.0A	1.220A	1.214	29.815A	2390	2390	1450.1W	655	489	4011
	175.0	176.2A	1.150W	1.143	29.839A	2392	2392	1450.3W	756	657	3988
	200.0	201.4A	1.140W	1.132	29.866A	2394	2394	1450.7A	855	850	3965



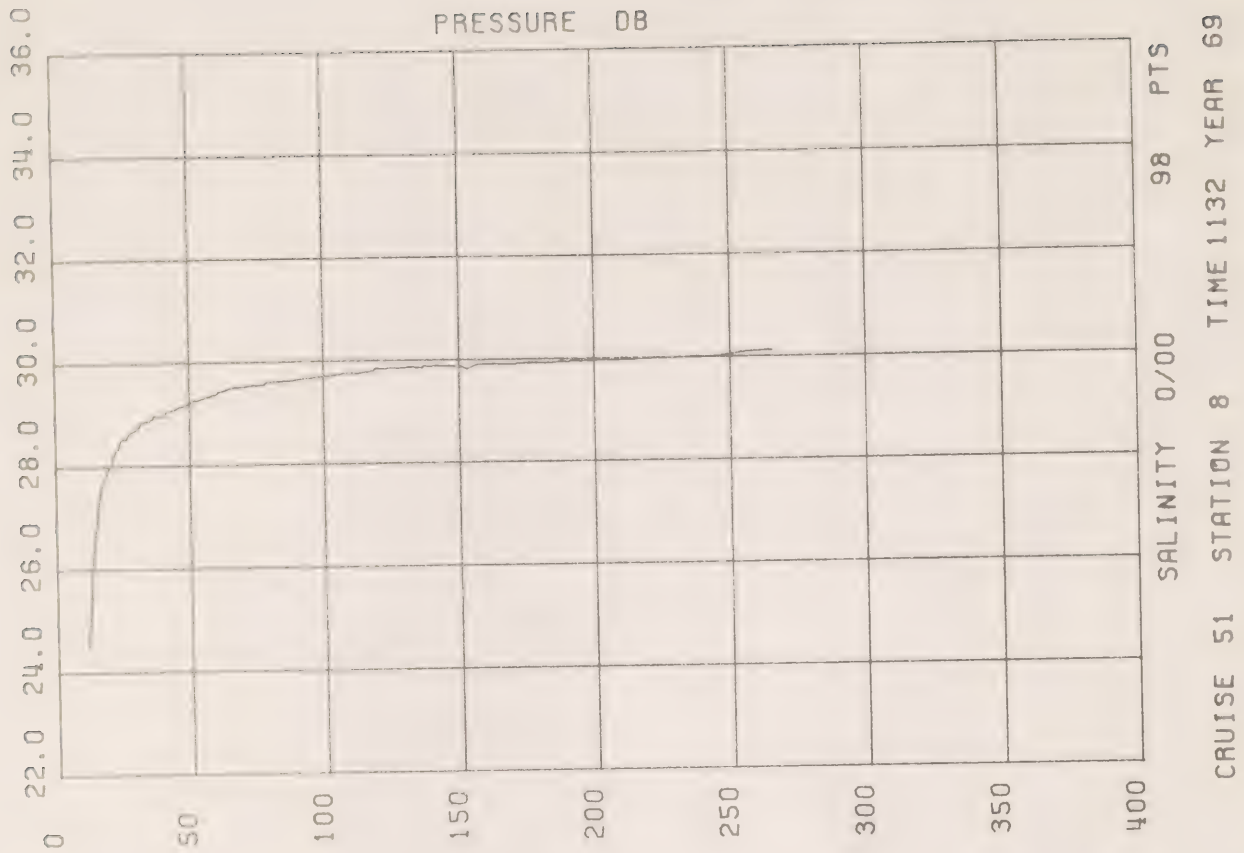
CRUISE NUMBER 69051 STATION NUMBER 007

LAT	N48	21.50	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 70	23.50	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		262.0	DAY	22	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	1052	BARO	WET-BLB	UNAS	SR03

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POI. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1W	6.266W	6.265	23.769W	1871	1871	1461.6W	2	0	8992
	20.0	20.2A	3.654W	3.653	28.115A	2238	2238	1456.5A	66	10	5469
	30.0	30.2A	2.767C	2.765	28.816B	2300	2300	1453.7A	118	23	4872
	50.0	50.4A	1.961A	1.959	29.390A	2351	2351	1451.2A	210	61	4381
	75.0	75.5A	1.799A	1.796	29.568A	2366	2366	1451.2W	318	130	4236
	100.0	100.7A	1.750W	1.746	29.714A	2379	2379	1451.5A	424	225	4120
	125.0	125.9A	1.997B	1.991	29.833B	2386	2386	1453.3A	527	344	4043
	150.0	151.0A	1.694A	1.687	29.830A	2389	2389	1452.3A	629	487	4028
	175.0	176.2A	1.571C	1.563	29.886A	2393	2393	1452.3A	729	655	3977
	200.0	201.4A	1.200A	1.192	29.887A	2396	2396	1451.0A	829	847	3952



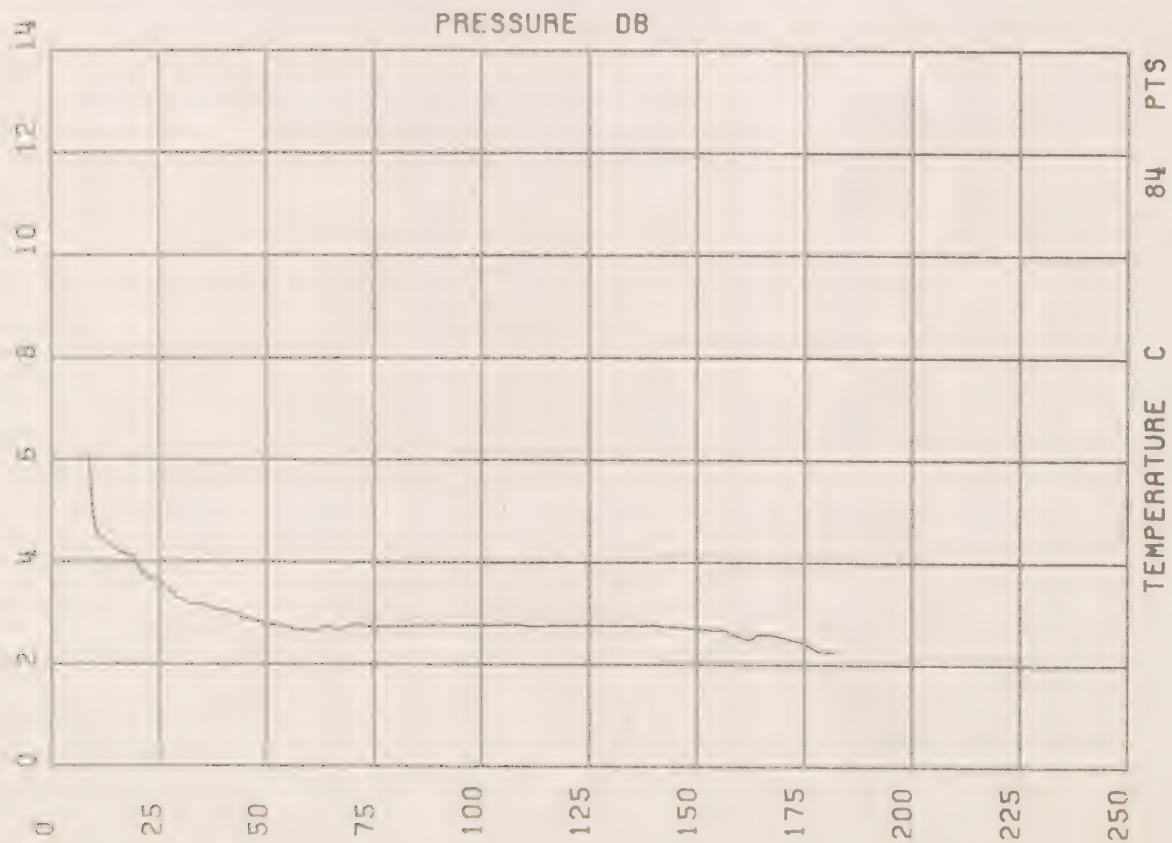
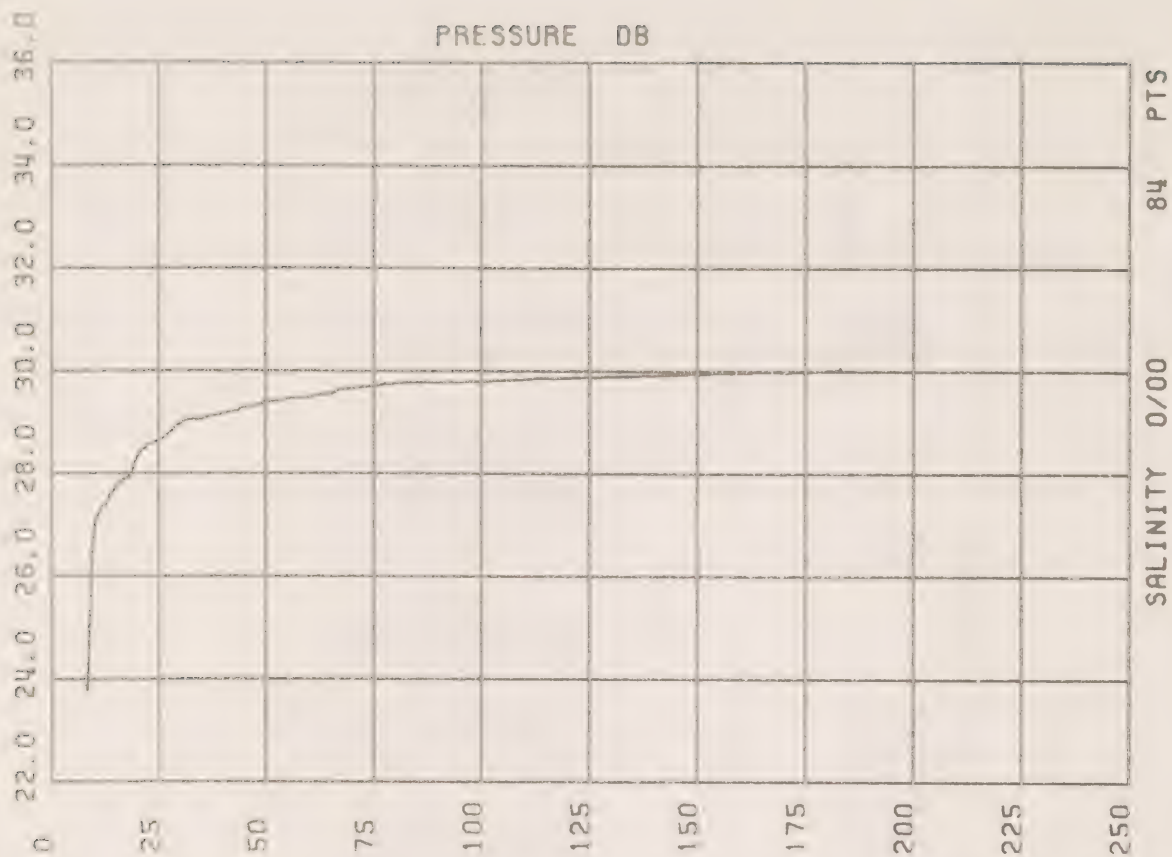
CRUISE NUMBER 69051 STATION NUMBER 008

LAT N48 17.80	YEAR 1969	WAVE-P/H	WIND-DIR	COUN 18
LONG W 70 14.50	MONTH 9	SWEL-P/H	WIND-SPD	INST 10
DEPTH 264.0	DAY 22	SWEL-D	AIR-TEM	RESTR
MARSD SQ	H/M 1135	BARO	WET-BLB	UNAS SR04

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	20.0	20.2A	4.029A	4.028	27.992A	2225	2225	1457.9A	57	9	5593
	30.0	30.2A	3.109C	3.107	28.698C	2290	2290	1454.9W	108	22	4986
	50.0	50.4A	2.515A	2.513	29.232A	2335	2335	1453.5A	203	62	4538
	75.0	75.5	2.130	2.126	29.538	2362	2362	1452.6	313	132	4279
	100.0	100.7A	2.211A	2.206	29.697A	2374	2374	1453.6A	419	227	4164
	125.0	125.9	2.510	2.504	29.836	2383	2383	1455.5	523	347	4077
	150.0	151.0A	2.423B	2.414	29.847B	2385	2385	1455.6A	625	490	4063
	175.0	176.2A	1.990A	1.982	29.918A	2393	2393	1454.1W	727	659	3980
	200.0	201.4A	1.930A	1.921	29.952A	2396	2396	1454.3A	827	851	3948
	225.0	226.6A	1.932A	1.921	29.982A	2399	2399	1454.8W	925	1068	3925
	250.0	251.8A	2.130B	2.118	30.062A	2404	2404	1456.2A	1024	1308	3879



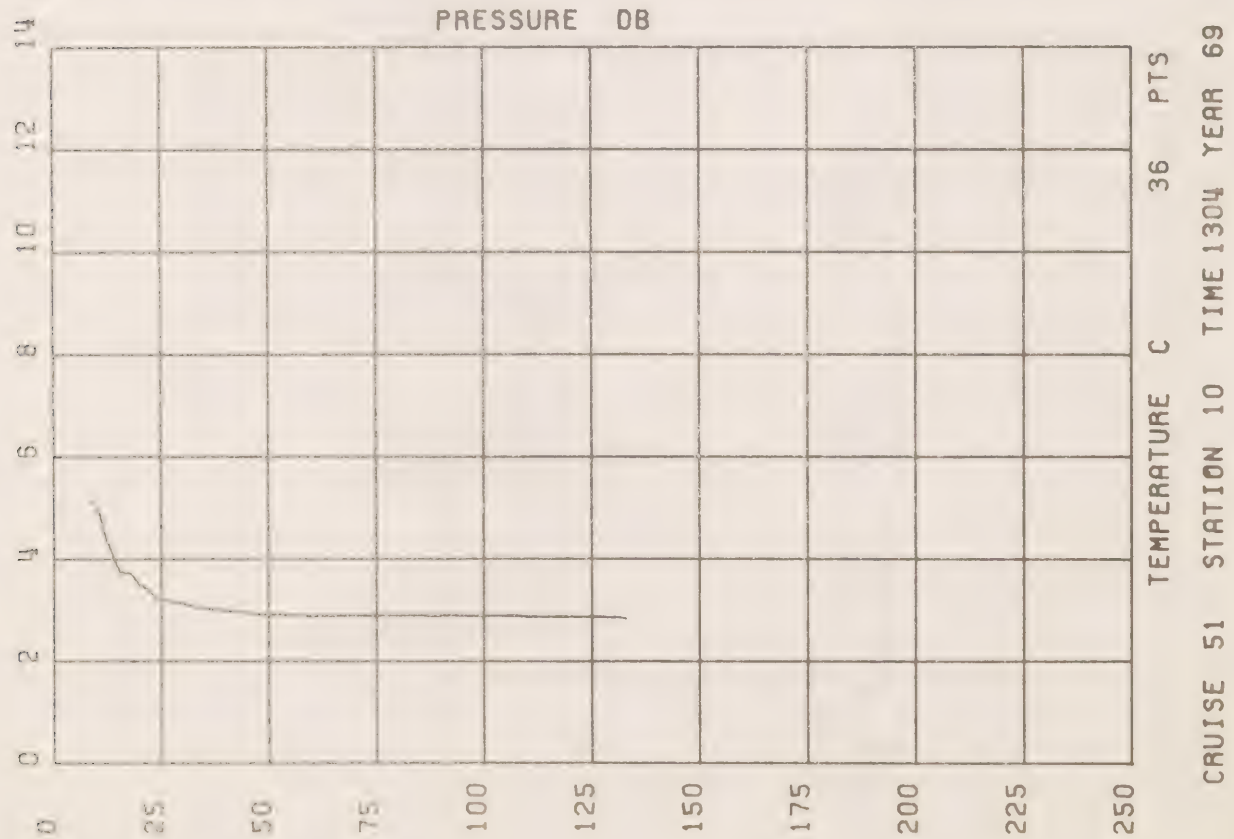
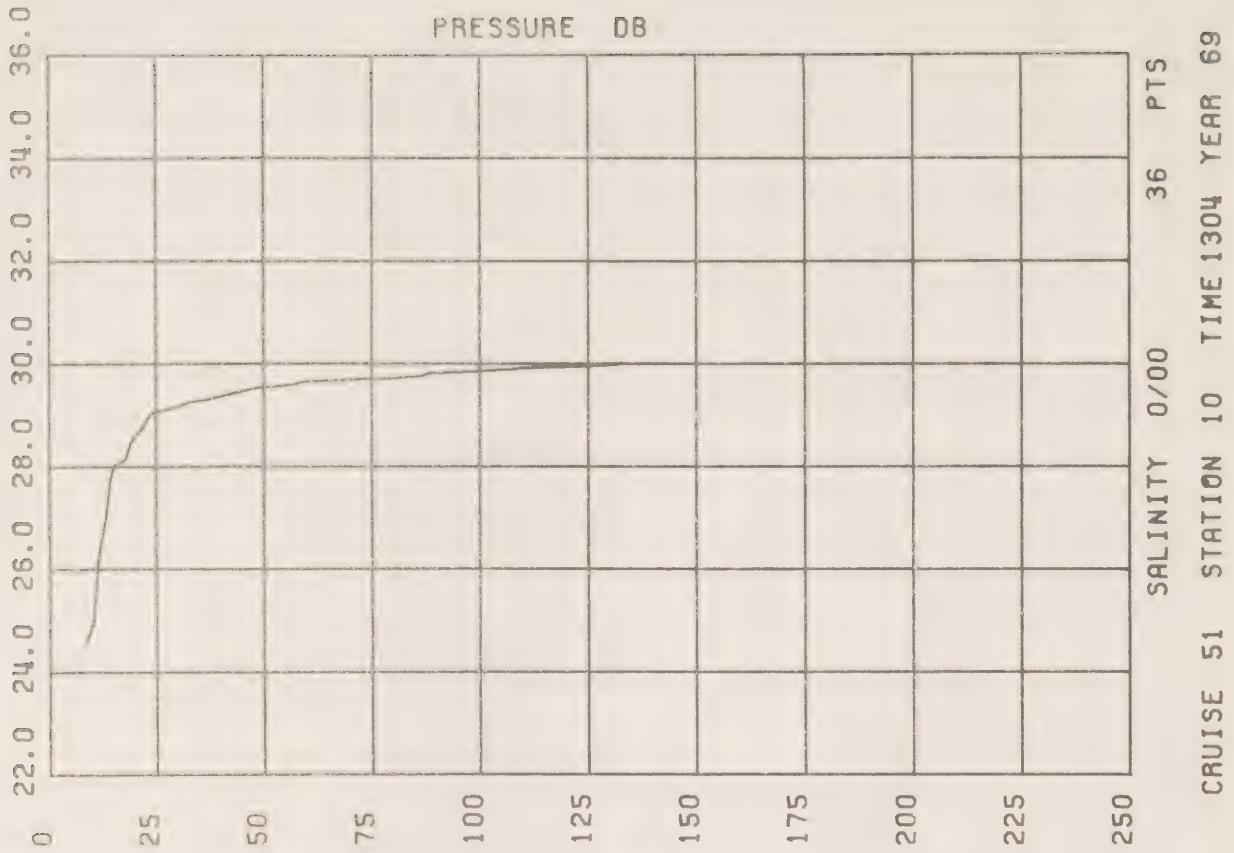
CRUISE NUMBER 69051 STATION NUMBER 009

LAT	N48	15.20	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 70	4.20	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		185.0	DAY	22	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	1222	BARO	WET-BLB	UNAS	SR05

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	4.534D	4.533	27.169D	2155	2155	1458.8A	13	1	6258
	20.0	20.2A	3.824A	3.823	28.390B	2258	2258	1457.6A	72	11	5275
	30.0	30.2A	3.244A	3.242	28.978A	2310	2310	1456.0A	121	23	4783
	50.0	50.4A	2.767A	2.764	29.375A	2344	2345	1454.8W	215	62	4447
	75.0	75.5A	2.727B	2.723	29.704A	2371	2371	1455.5W	324	130	4195
	100.0	100.7A	2.768W	2.763	29.789A	2377	2377	1456.2W	428	224	4132
	125.0	125.9A	2.760W	2.753	29.874A	2384	2384	1456.7A	532	344	4068
	150.0	151.0A	2.699W	2.691	29.940A	2390	2390	1456.9W	632	487	4013
	175.0	176.2A	2.367A	2.358	29.982A	2396	2396	1455.9A	733	654	3958

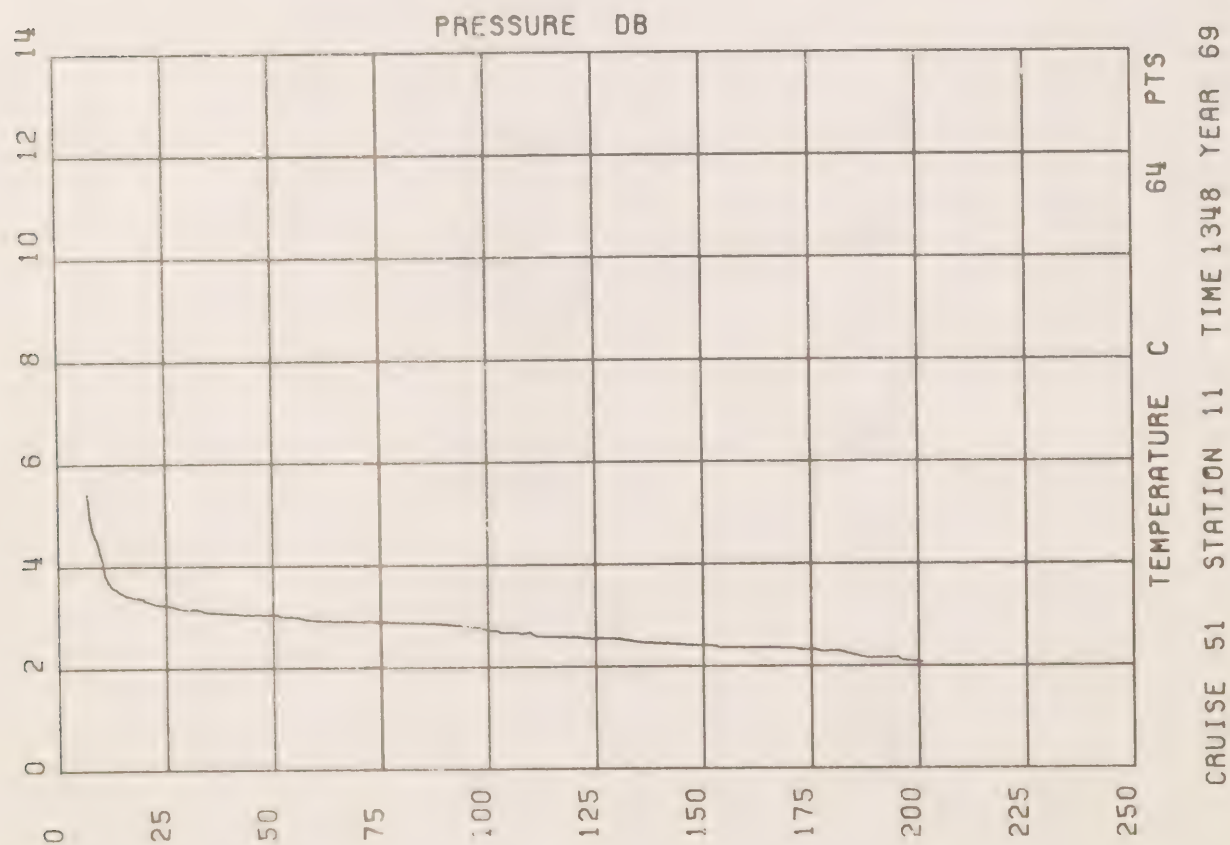
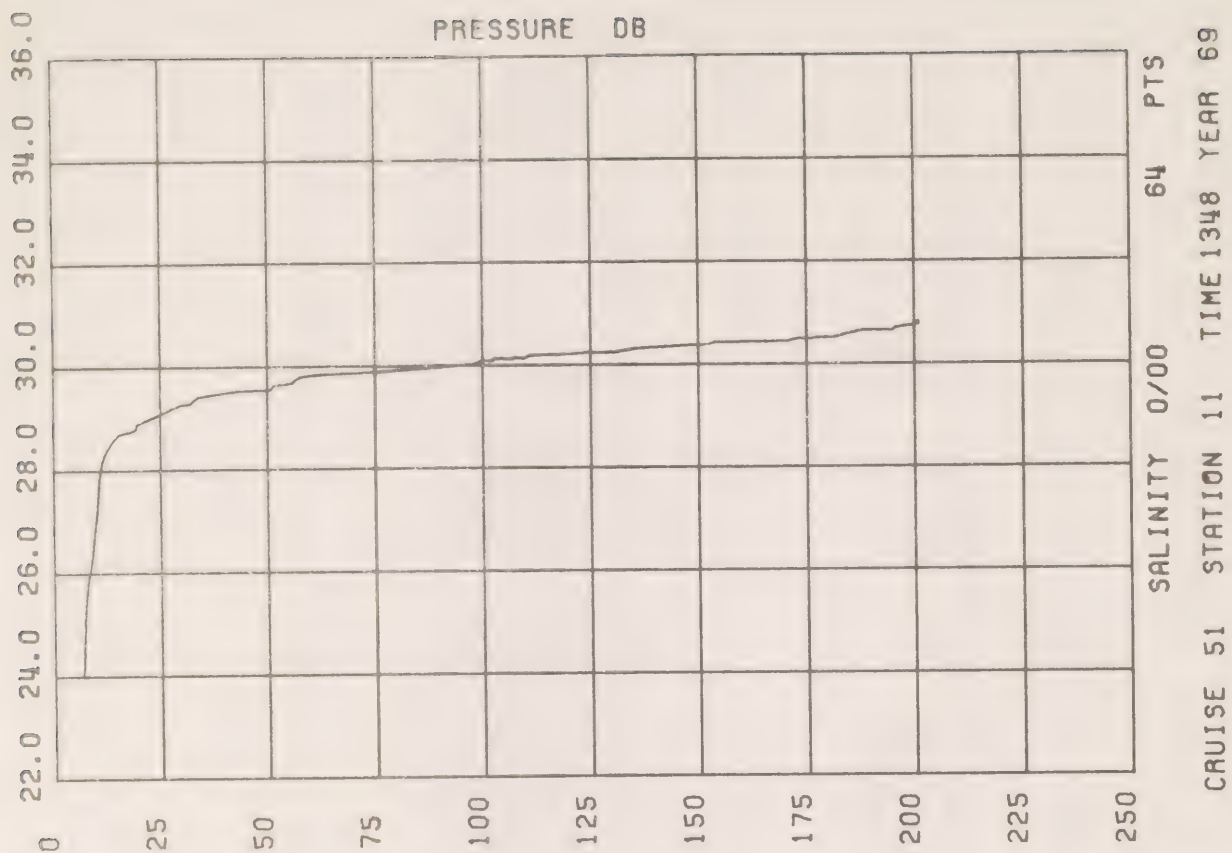


LAT N48		13.60	YEAR 1969		WAVE-P/H	WIND-DIR	WW	COUN	18
LONG W 69		53.90	MONTH 9		SWEL-P/H	WIND-SPD	CLD-A	INST	10
DEPTH		144.0	DAY 22		SWEL-D	AIR-TEM		RESTR	
MARSD SQ			H/M 1307		BARO	WET-BLB		UNAS	SR06

CRUISE NUMBER 69051 STATION NUMBER 010

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEDA	CHI	SVA
	10.0	10.1A	5.007B	5.006	24.908C	1972	1972	1457.8W	15	1	8013
	20.0	20.2A	3.468A	3.467	28.606A	2278	2278	1456.3W	75	11	5083
	30.0	30.2A	3.119A	3.117	29.168A	2325	2325	1455.8W	122	22	4630
	50.0	50.4A	2.910W	2.907	29.537A	2357	2357	1455.6W	213	60	4334
	75.0	75.5A	2.900W	2.896	29.687A	2368	2368	1456.2W	320	128	4220
	100.0	100.7A	2.890W	2.885	29.847A	2381	2381	1456.8W	424	222	4098
	125.0	125.9A	2.869W	2.862	29.945A	2389	2389	1457.2W	526	340	4022



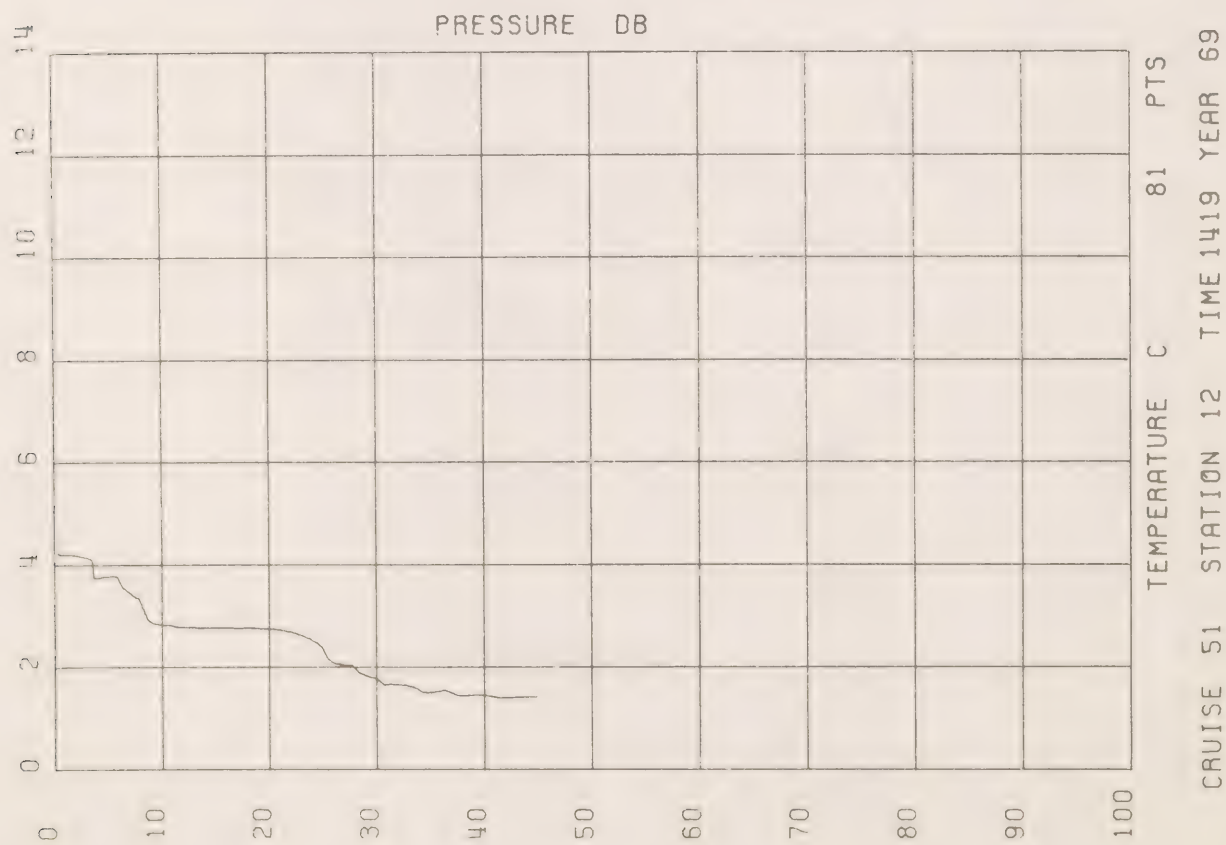
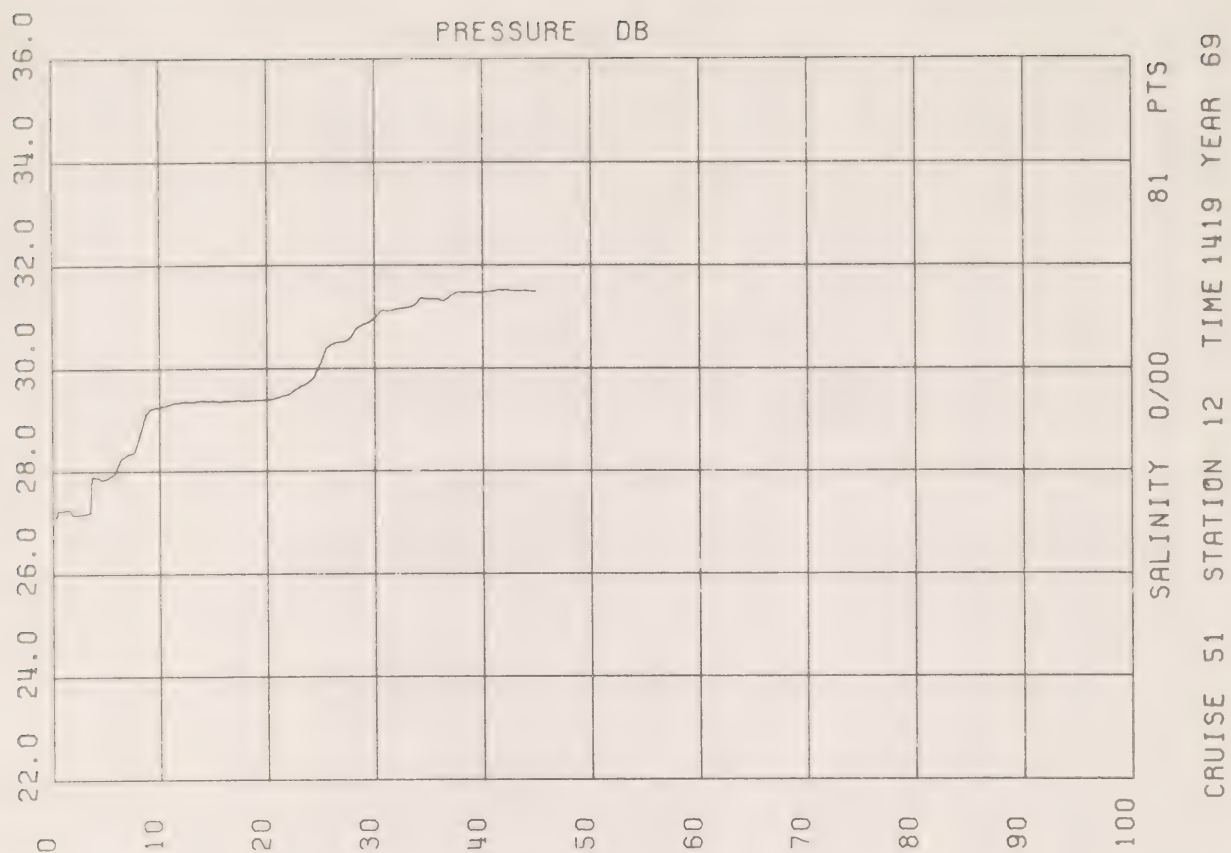
CRUISE NUMBER 69051 STATION NUMBER 011

LAT	N48	8.30	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 69	46.10	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		208.0	DAY	22	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	1350	BARO	WET-BLB	UNAS	SR07

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEDA	CHI	SVA
	10.0	10.1A	4.148B	4.147	27.111B	2154	2154	1457.1A	24	2	6270
	20.0	20.2A	3.310A	3.309	28.912C	2304	2304	1456.1W	77	10	4840
	30.0	30.2A	3.150W	3.148	29.272A	2333	2333	1456.0W	123	22	4553
	50.0	50.4A	3.040W	3.037	29.541A	2356	2356	1456.2W	212	58	4341
	75.0	75.5	2.900	2.896	29.881	2384	2384	1456.5	316	125	4072
	100.0	100.7A	2.704B	2.699	30.096A	2402	2402	1456.3A	417	215	3895
	125.0	125.9	2.560	2.553	30.222	2414	2414	1456.3	513	327	3789
	150.0	151.0A	2.420A	2.412	30.369A	2426	2426	1456.3W	607	458	3667
	175.0	176.2A	2.317W	2.308	30.492A	2437	2437	1456.4W	697	610	3567
	200.0	201.4W	2.088W	2.078	30.772W	2460	2460	1456.2W	784	778	3337



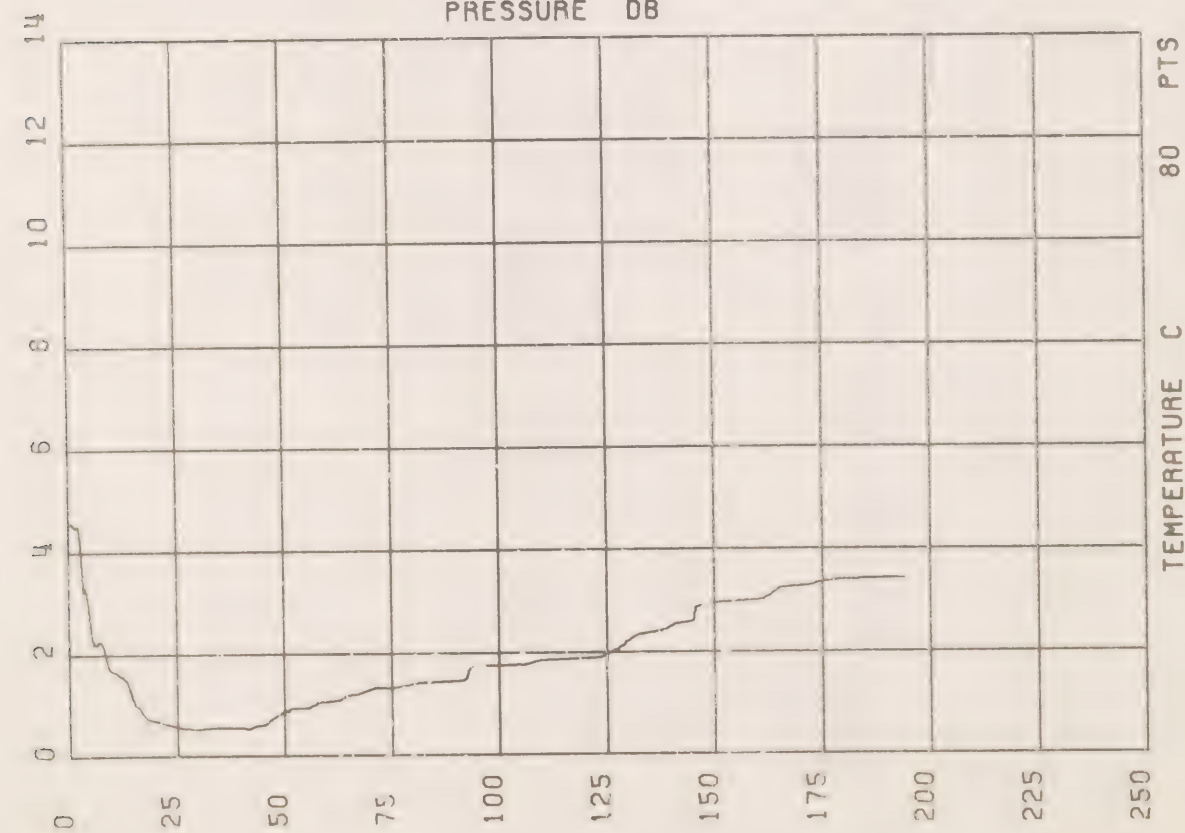
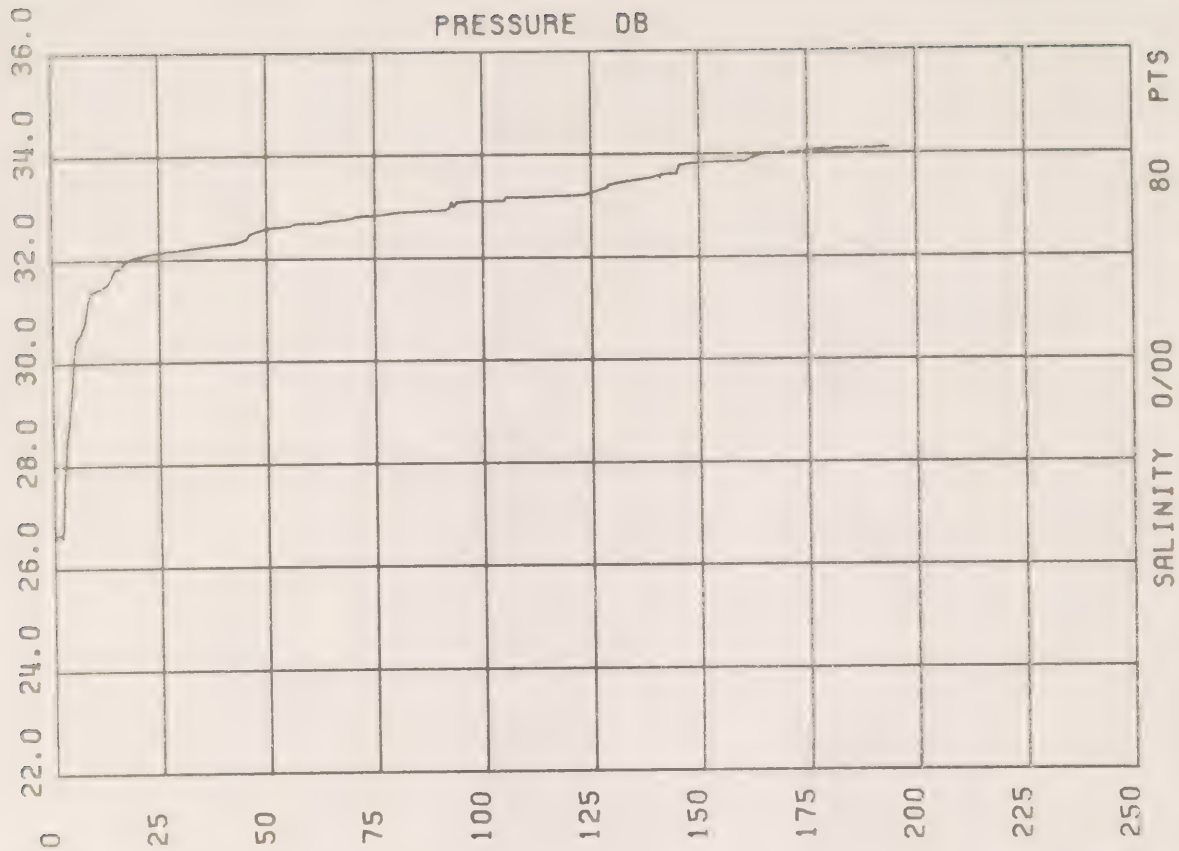
CRUISE NUMBER 69051 STATION NUMBER 012

LAT N48	7.40	YEAR 1969	WAVE-P/H	WIND-DIR	COUN 18
LONG W 69	41.10	MONTH 9	SWEL-P/H	WIND-SPD	INST 10
DEPTH	48.0	DAY 22	SWEL-D	AIR-TEM	RESTR
MARSD SQ		H/M 1418	BARO	WET-BLB	UNAS SR08

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	2.832A	2.831	29.259A	2335	2335	1454.3W	55	3	4539
	20.0	20.2A	2.752W	2.751	29.389A	2346	2346	1454.2W	100	10	4436
	30.0	30.2A	1.755C	1.754	31.028A	2484	2484	1452.2W	137	19	3124



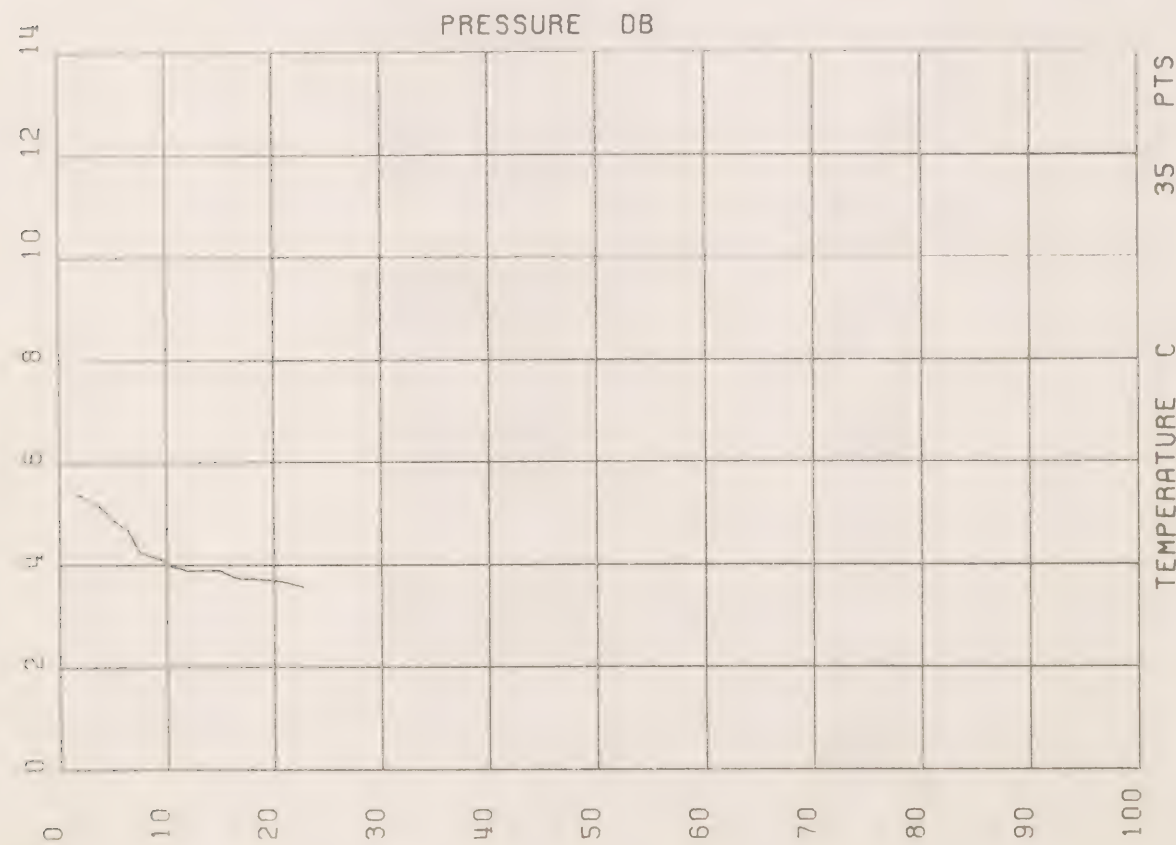
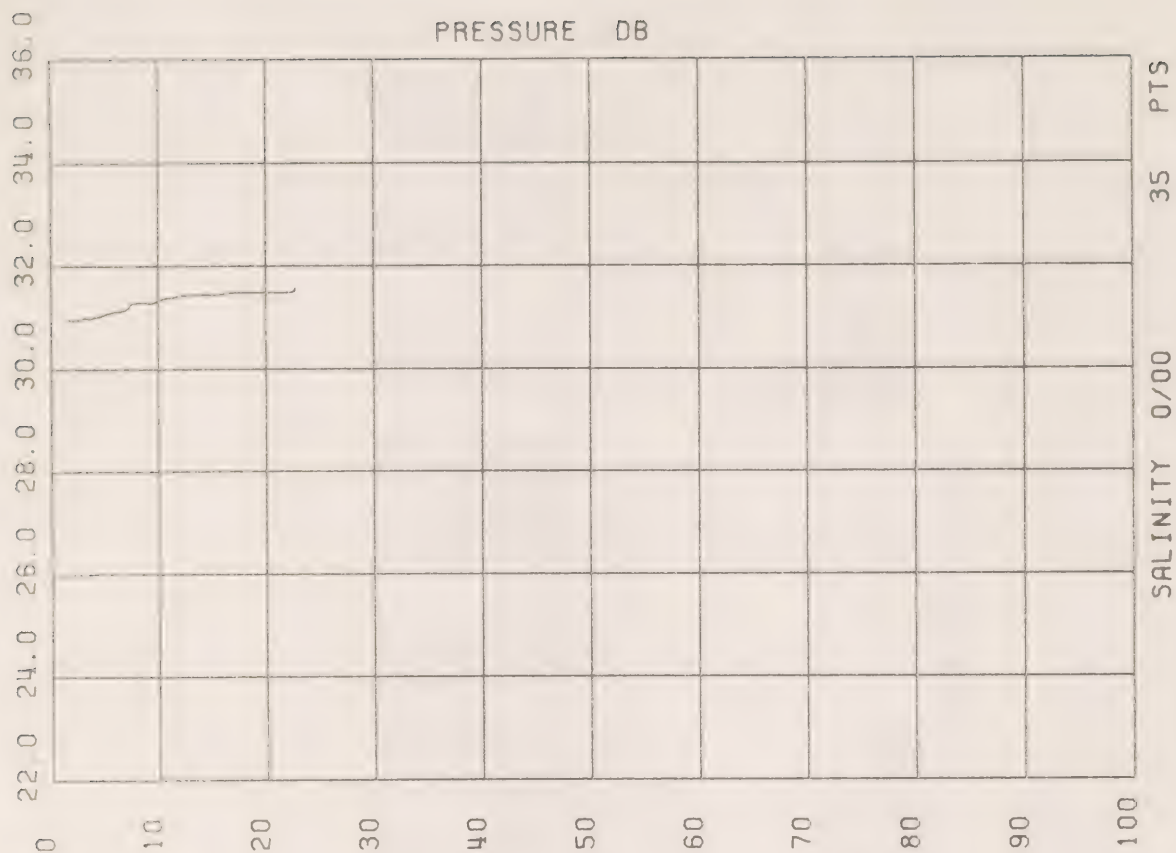
CRUISE NUMBER 69051 STATION NUMBER 013

LAT	N48	9.90	YEAR 1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 69	33.90	MONTH 9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		147.0	DAY 22	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M 1457	BARO	WET-BLB	UNAS	SR09

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOD	CHI	SVA
	10.0	10.1A	1.666A	1.666	31.401A	2514	2514	1452.0A	43	2	2834
	20.0	20.2A	0.688A	0.687	32.070A	2573	2573	1448.7W	68	6	2268
	30.0	30.2A	0.531W	0.530	32.193A	2584	2584	1448.3W	90	11	2167
	50.0	50.4A	0.870W	0.868	32.590A	2614	2614	1450.8A	132	29	1880
	75.0	75.5A	1.312A	1.309	32.839A	2631	2631	1453.5A	178	57	1719
	100.0	100.7A	1.740W	1.735	33.107A	2650	2650	1456.2A	218	94	1544
	125.0	125.9A	1.994A	1.988	33.285A	2663	2663	1458.0A	256	139	1429
	150.0	151.0A	2.949A	2.940	33.837A	2699	2699	1463.3A	288	182	1090
	175.0	176.2A	3.351A	3.340	34.076A	2714	2714	1465.7W	313	225	950

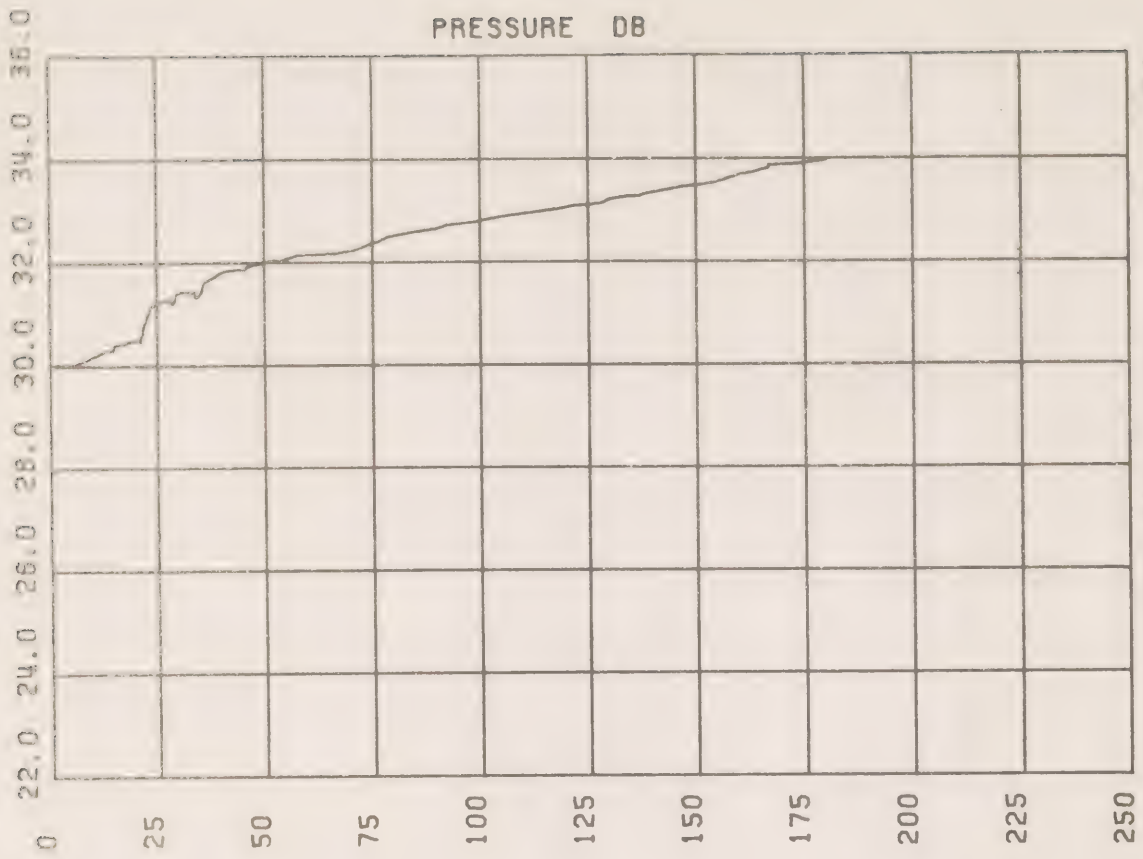


CRUISE NUMBER 69051 STATION NUMBER 015

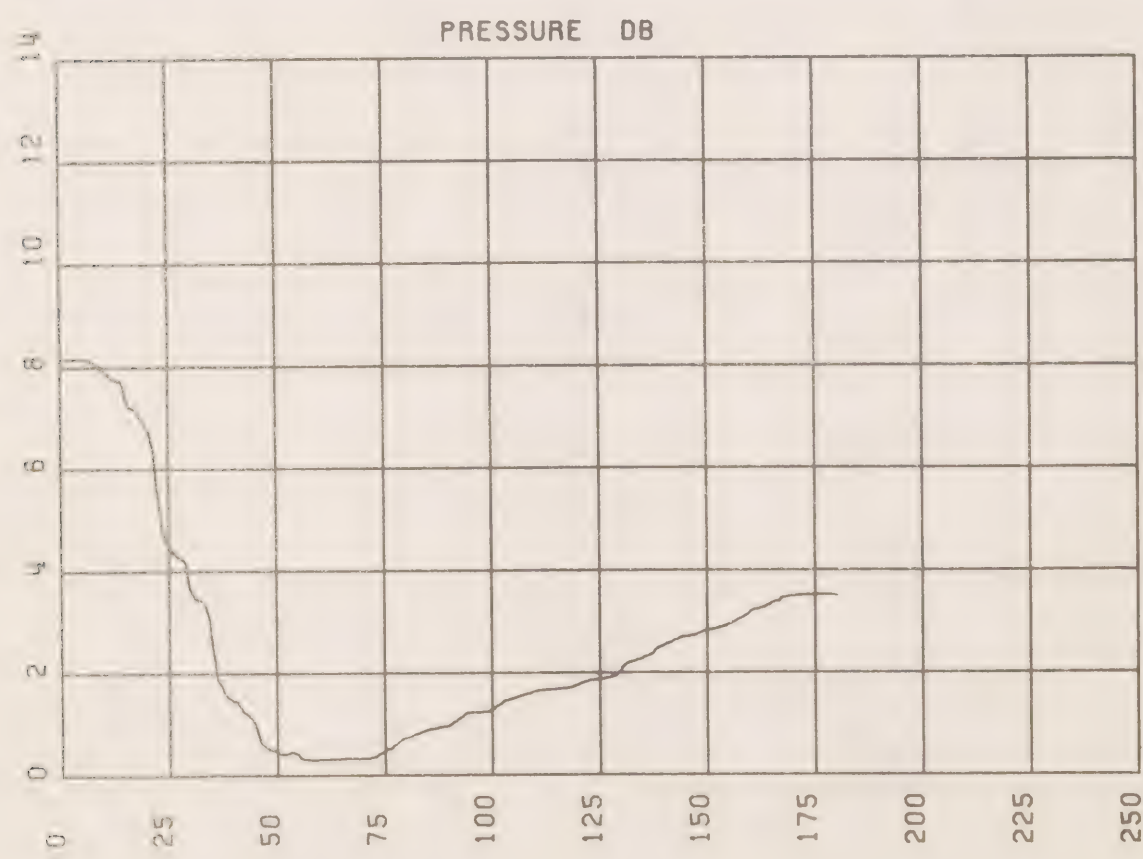
LAT	N49	50.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	30.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		24.0	DAY	23	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	0720	BARO	WET-BLB	UNAS	01A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	3.988A	3.987	31.344A	2491	2491	1462.1W	28	2	3057
	20.0	20.2A	3.685A	3.684	31.482A	2505	2505	1461.1A	58	6	2925



SALINITY 0/00 97 PTS
 CRUISE 51 STATION 16 TIME 753 YEAR 69



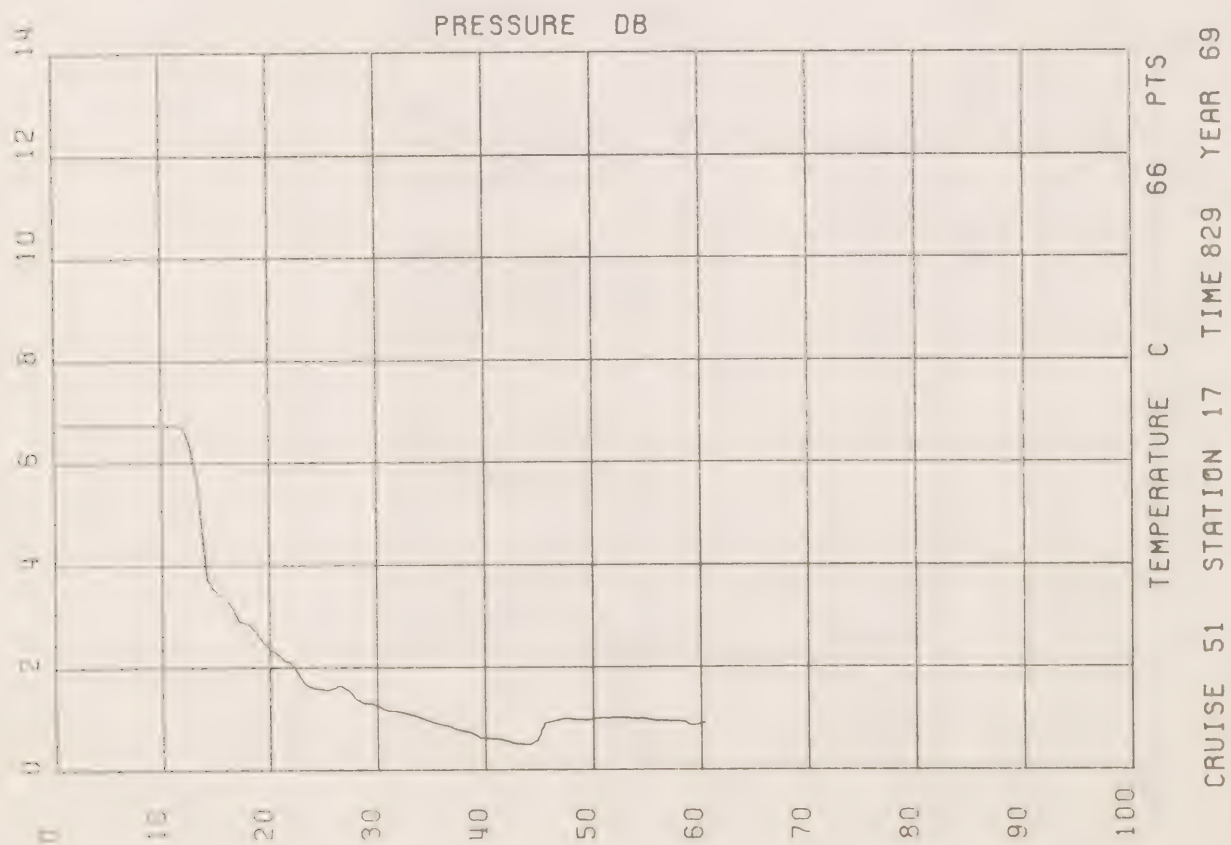
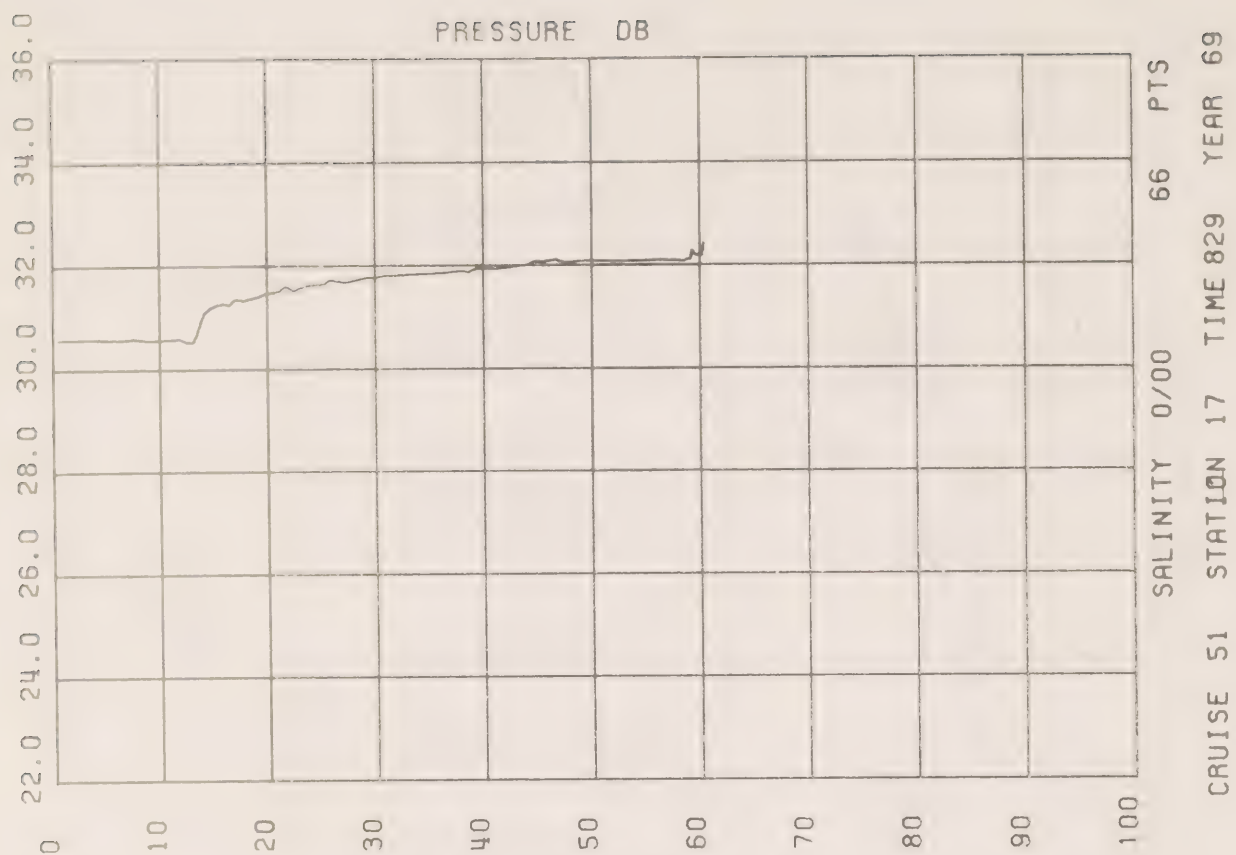
TEMPERATURE C 97 PTS
 CRUISE 51 STATION 16 TIME 753 YEAR 69

CRUISE NUMBER 69051 STATION NUMBER 016

LAT	N49	40.00	YEAR	1969	WAVE-P/H	WIND-SPD	COUN	18
LONG	W 64	30.00	MONTH	9	SWEL-P/H	WIND-DIR	INST	10
DEPTH		195.0	DAY	23	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	0807	BARO	WET-BLB	UNAS	02A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	7.877W	7.876	30.172A	2353	2353	1476.2A	44	2	4367
	20.0	20.2A	6.710A	6.708	30.496A	2394	2394	1472.3A	87	9	3979
	30.0	30.2A	3.524C	3.522	31.432D	2502	2502	1460.7W	120	18	2947
	50.0	50.4A	0.435A	0.433	31.996A	2568	2568	1448.0A	172	38	2313
	75.0	75.5	0.500	0.497	32.382	2599	2599	1449.2	227	73	2019
	100.0	100.7A	1.300B	1.296	32.811A	2630	2630	1453.8A	274	116	1739
	125.0	125.9A	1.873A	1.867	33.117A	2650	2650	1457.2A	314	162	1547
	150.0	151.0A	2.815W	2.806	33.491A	2672	2672	1462.2W	350	213	1339
	175.0	176.2A	3.520W	3.508	33.914A	2699	2699	1466.2A	381	264	1087



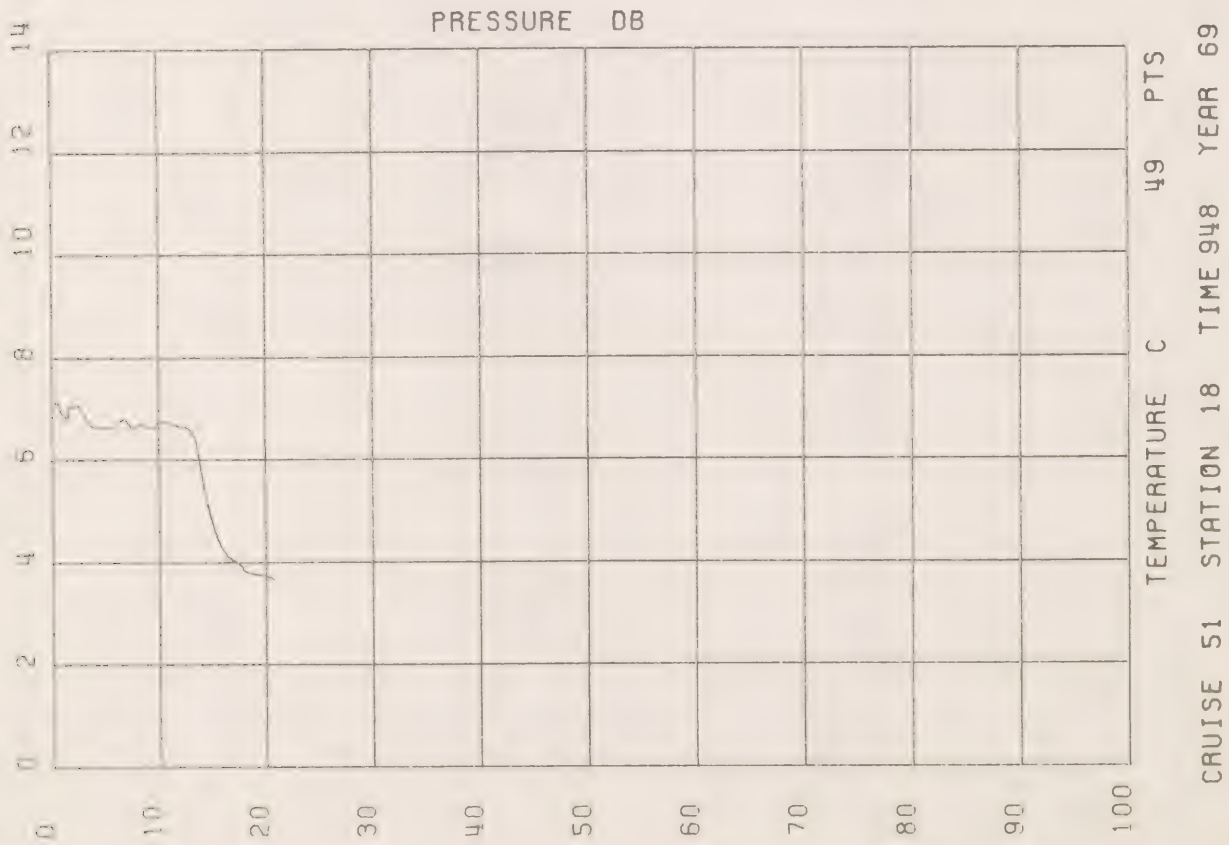
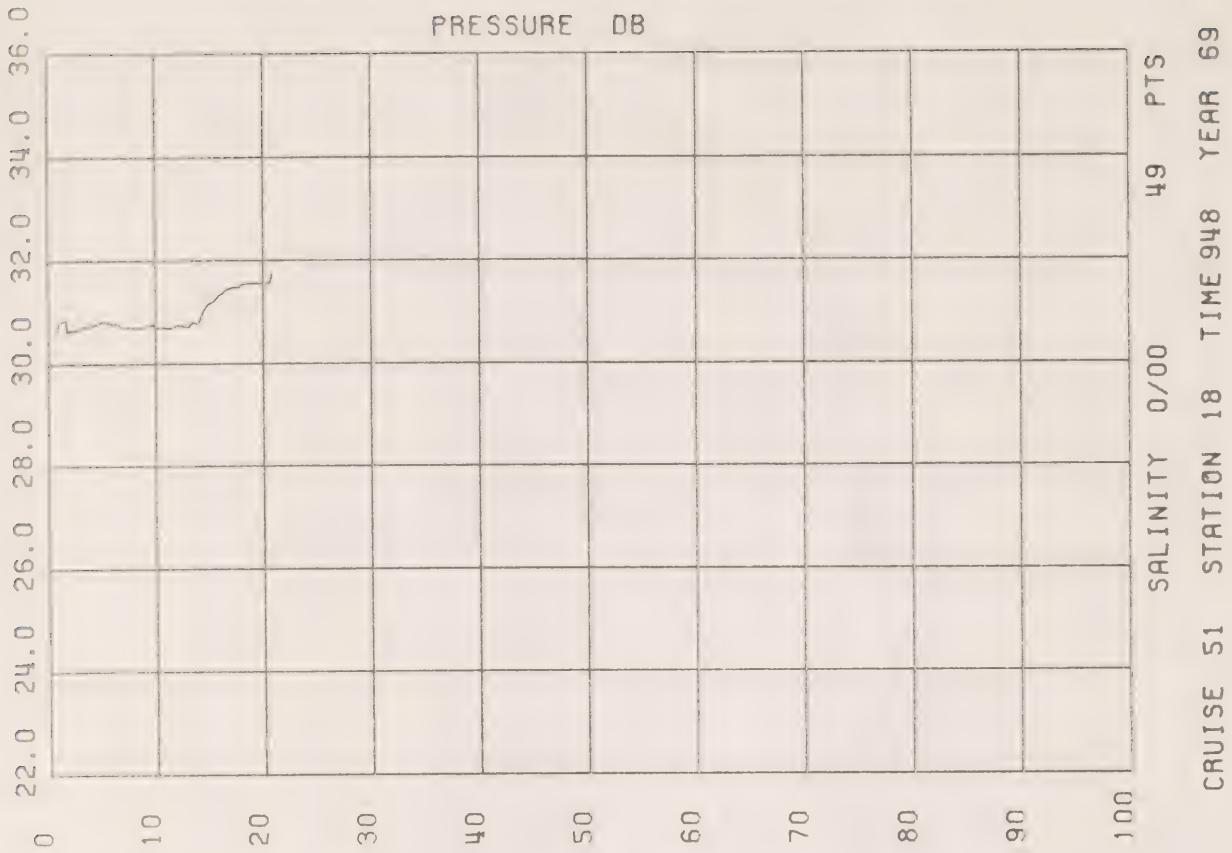
CRUISE NUMBER 69051 STATION NUMBER 017

LAT	N49	40.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	15.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		65.0	DAY	23	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	0902	BAPO	WET-BLB	UNAS	02B

WW
CLD-A

INTERPOLATED

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1	6.730	6.729	30.569	2399	2399	1472.3	37	2	3927
	20.0	20.2A	2.312B	2.311	31.479B	2516	2516	1455.2A	70	7	2817
	30.0	30.2A	1.223A	1.222	31.773A	2546	2546	1450.9A	98	14	2524
	50.0	50.4A	1.005A	1.003	32.076A	2572	2572	1450.6W	145	33	2282



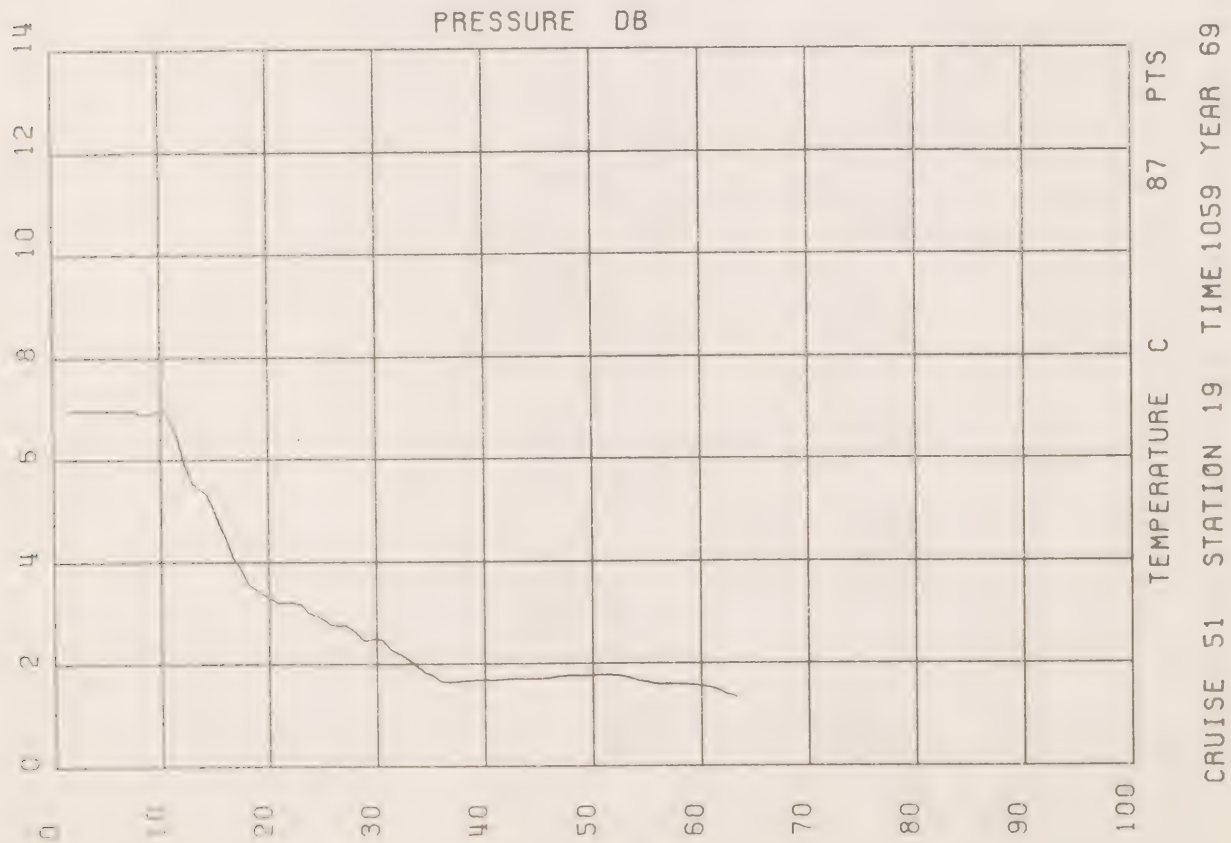
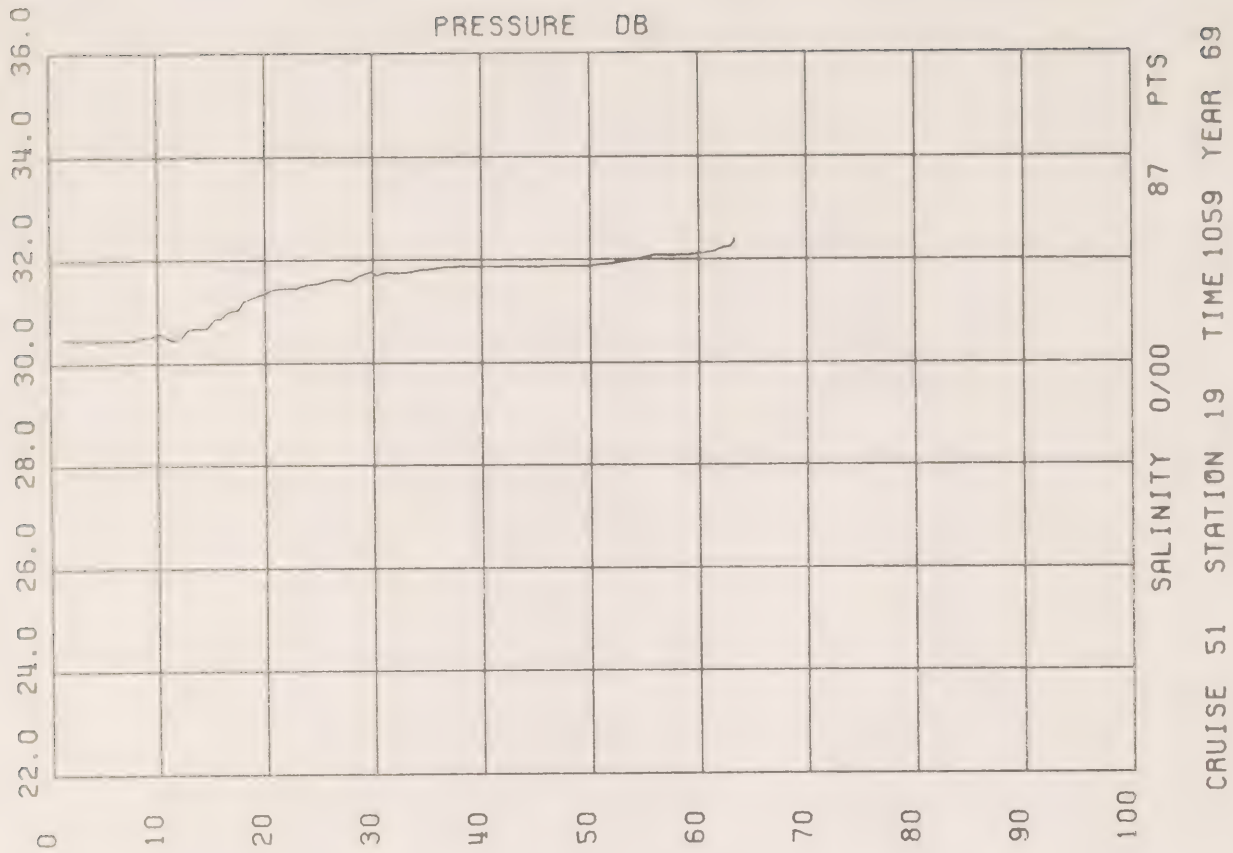
CRUISE NUMBER 69051 STATION NUMBER 018

LAT	N49	40.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	0.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		26.0	DAY	23	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	0950	BARO	WET-BLB	UNAS	02C

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	6.766C	6.765	30.685C	2408	2408	1472.6W	37	2	3843
	20.0	20.2	3.730	3.729	31.545	2509	2509	1461.4	71	7	2881

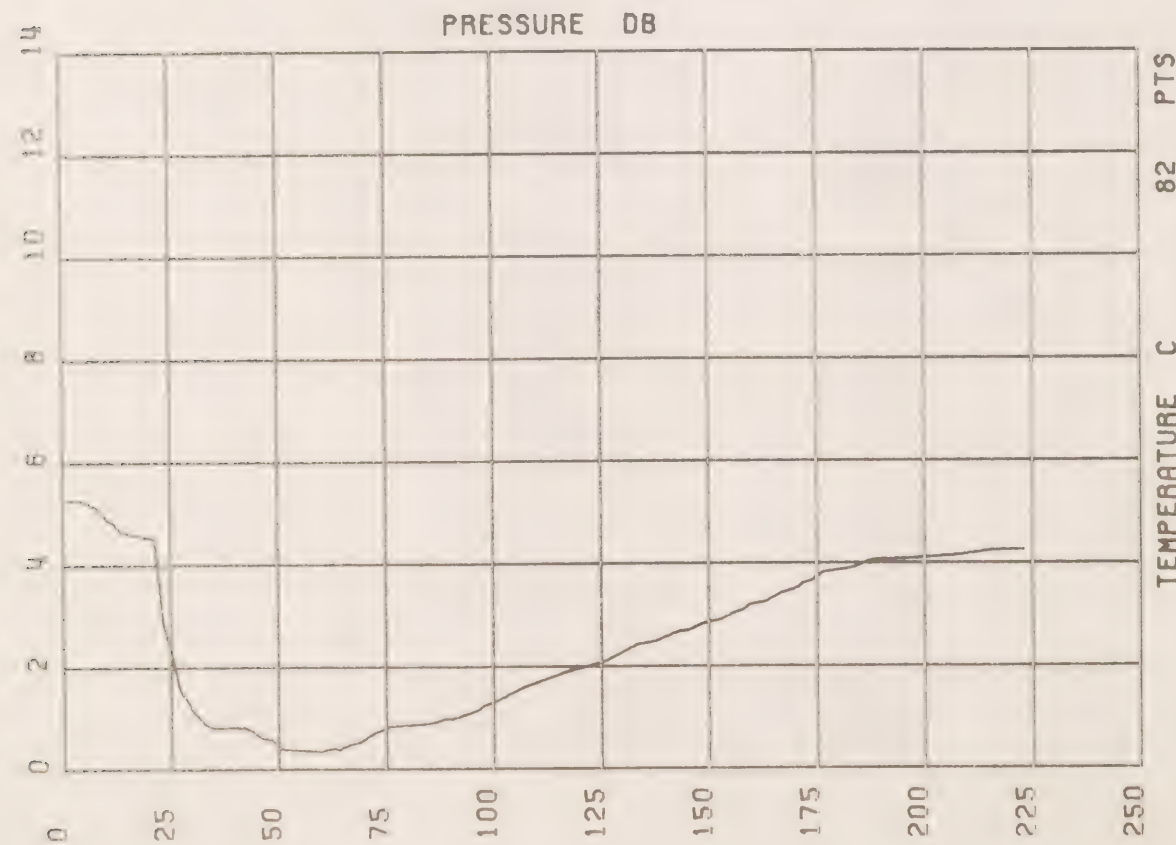
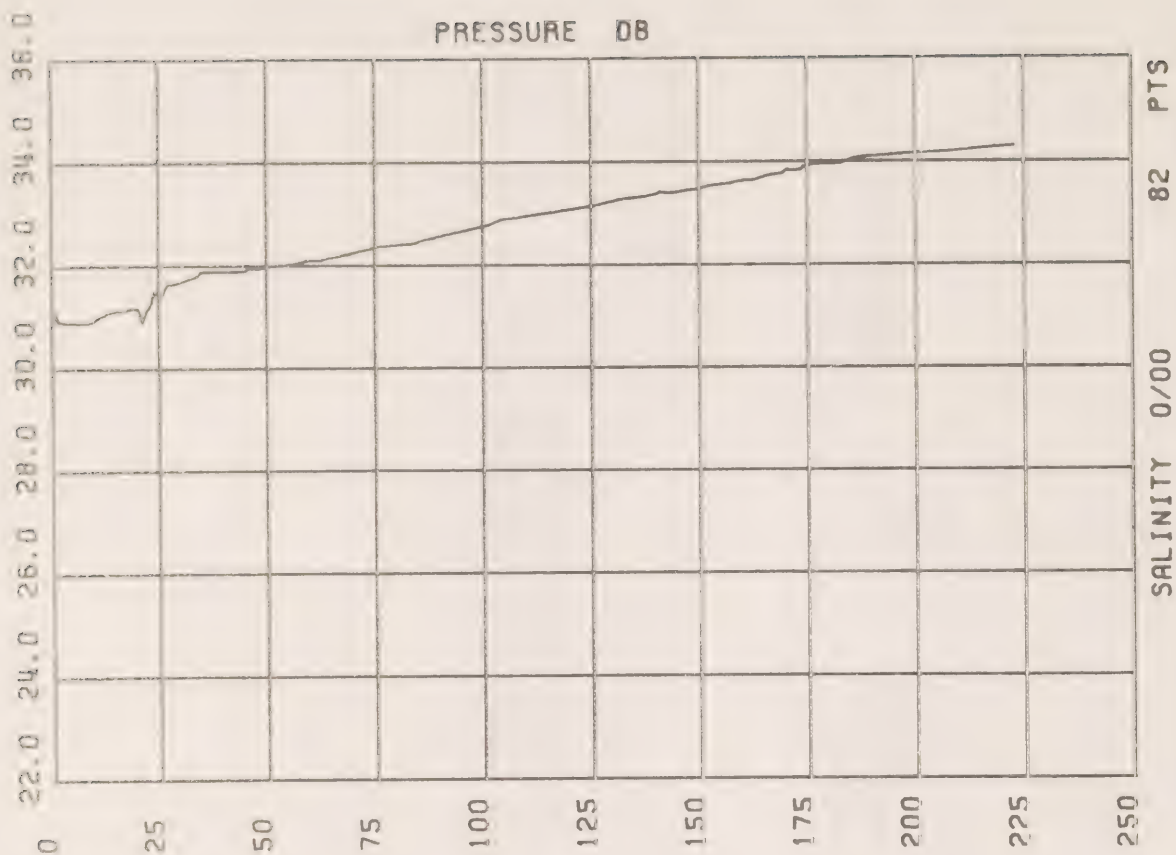


LAT N49 30.00
 LONG W 63 45.00
 DEPTH 62.0
 MARSD SQ
 YEAR 1969
 MONTH 9
 DAY 23
 H/M 1100
 WAVE-P/H
 SWEL-P/H
 SWEL-D
 BARO
 WIND-DIR
 WIND-SPD
 AIR-TEM
 WET-BLB
 W W
 CLD--A
 COUN 18
 INST 10
 RESTR
 UNAS 03D

CRUISE NUMBER 69051 STATION NUMBER 019

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEDA	CHI	SVA
	10.0	10.1	6.990	6.989	30.601	2398	2393	1473.4	36	2	3935
	20.0	20.2A	3.260W	3.259	31.361A	2499	2499	1459.2W	71	7	2980
	30.0	30.2A	2.489A	2.487	31.724C	2534	2534	1456.4W	99	15	2643
	50.0	50.4A	1.777W	1.775	31.890A	2552	2552	1453.9W	149	36	2470

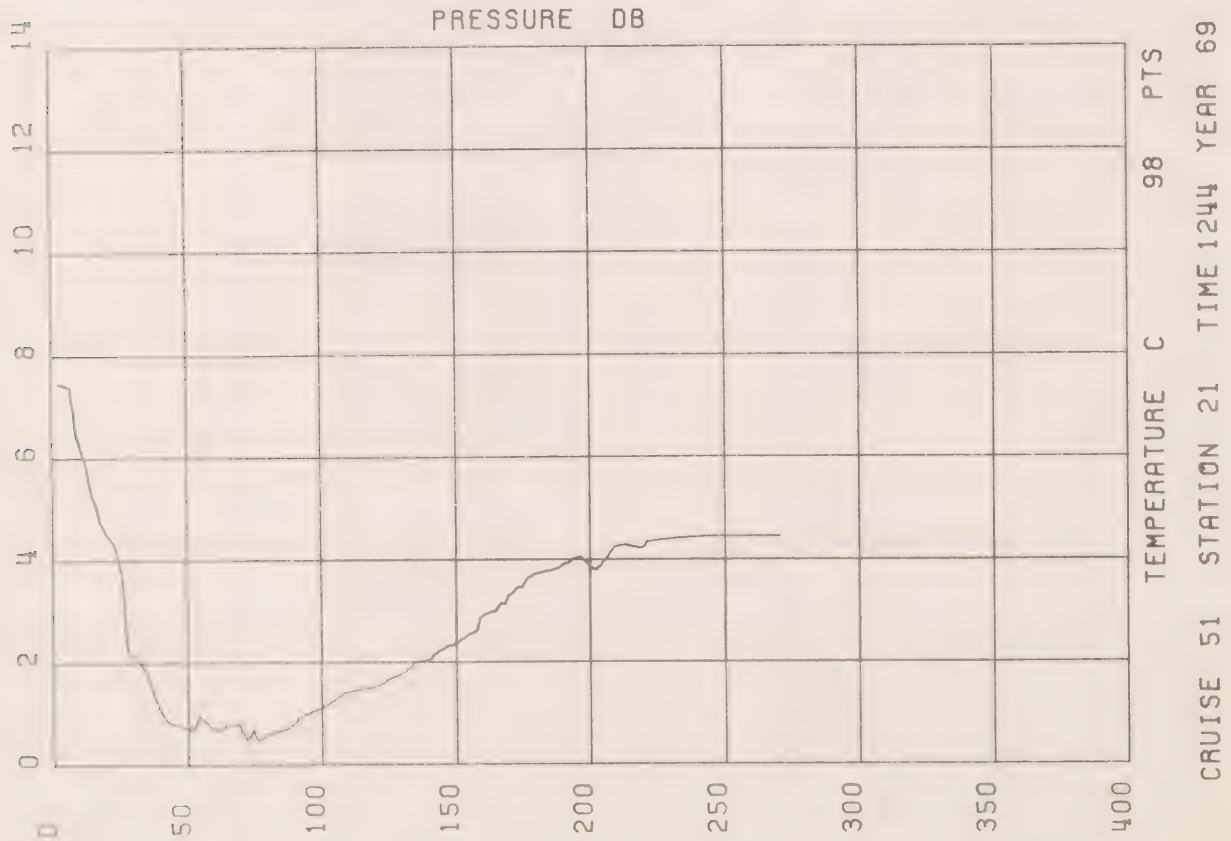
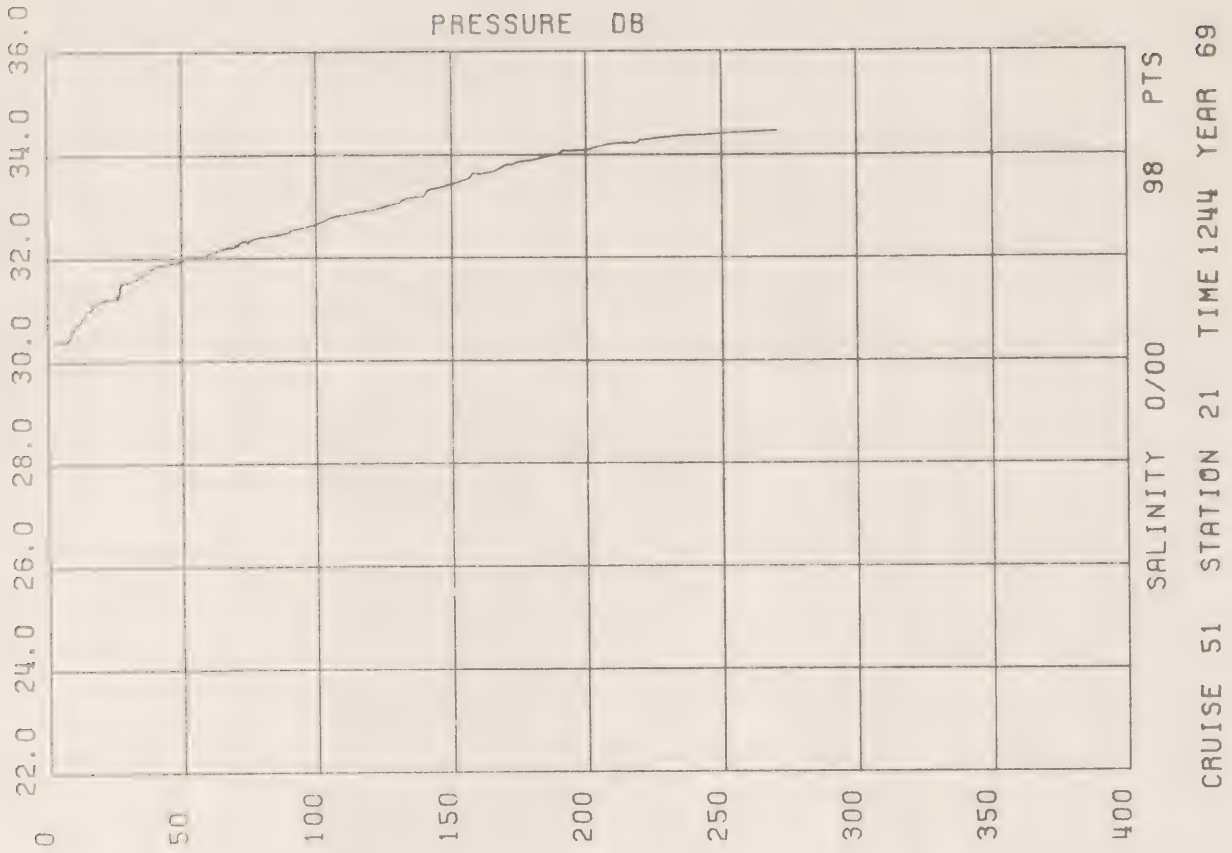


CRUISE NUMBER 69051 STATION NUMBER 020

LAT	N49	30.00	YEAR	1969	WAVE-P/H	WIND-DIR	WW	C5	COUN	18
LONG	W 64	0.00	MONTH	9	SWEL-P/H	WIND-SPD	CLD-A	1	INST	10
DEPTH		236.0	DAY	23	SWEL-D	AIR-TEM			RESTR	
MARSD	SQ		H/M	1148	BARO	WET-BLB			UNAS	03C
					1014.2					

INTERPOLATED

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	4.834A	4.883	30.930A	2449	2449	1465.3W	33	2	3452
	20.0	20.2A	4.541W	4.54C	31.170B	2471	2471	1464.3W	67	7	3240
	30.0	30.2A	1.096C	1.095	31.684B	2540	2540	1450.2A	96	14	2585
	50.0	50.4A	0.398B	0.396	31.984A	2568	2568	1447.8W	143	34	2519
	75.0	75.5	0.83C	0.827	32.370	2597	2597	1450.7	199	70	2046
	100.0	100.7	1.33C	1.325	32.759	2625	2625	1453.9	248	113	1781
	125.0	125.9A	2.094A	2.087	33.154A	2651	2651	1458.2A	289	161	1536
	150.0	151.0A	2.865A	2.856	33.500A	2672	2672	1462.4A	325	211	1338
	175.0	176.2	3.800	3.788	33.945	2699	2699	1467.5	356	263	1091
	200.0	201.4A	4.112A	4.098	34.160A	2713	2713	1469.5A	381	313	962



CRUISE NUMBER 69051 STATION NUMBER 021

LAT N49 30.00 YEAR 1969 WAVE-P/H WIND-DIR COUN 18
 LONG W 64 15.00 MONTH 9 SWEL-P/H WIND-SPD INST 10
 DEPTH 272.0 DAY 23 SWEL-D AIR-TEM RESTR
 MARSD SQ H/M 1244 BARO WET-BLB UNAS 03R

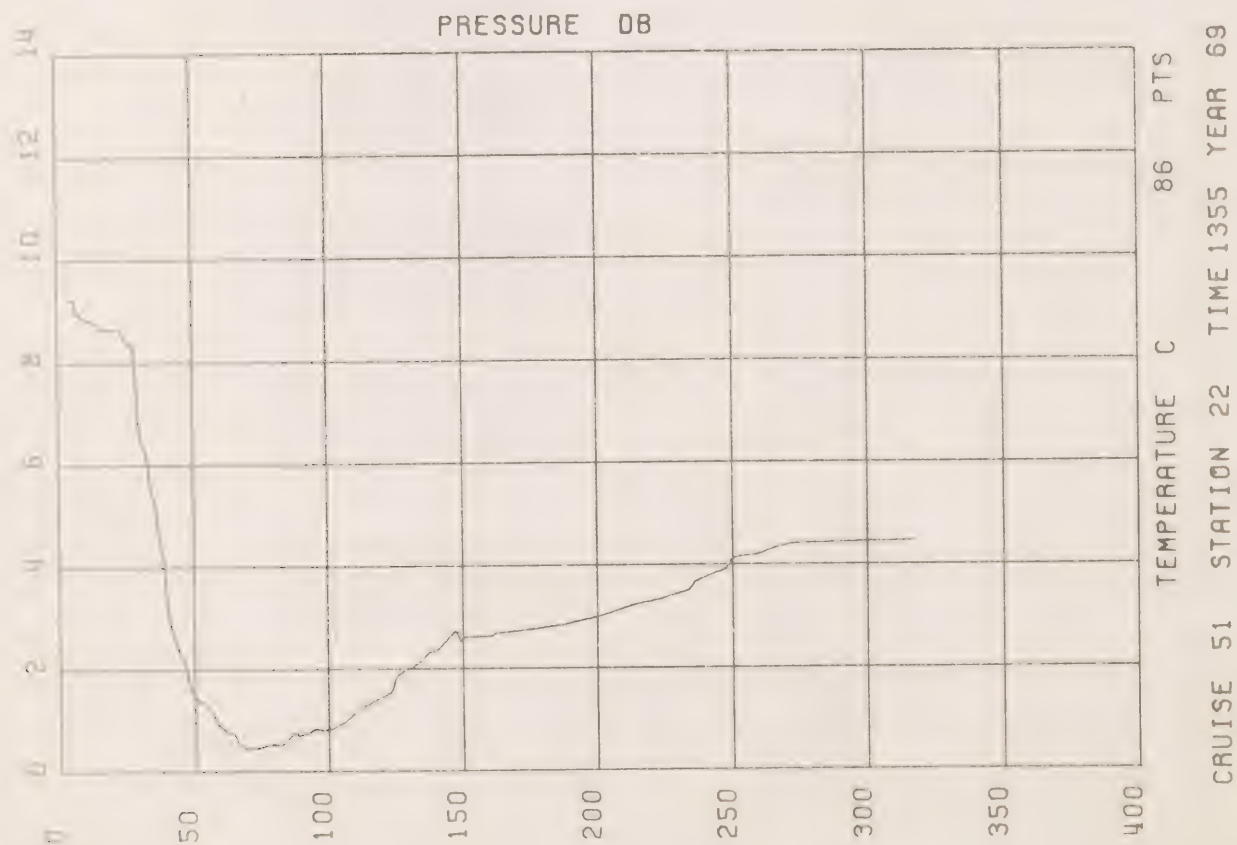
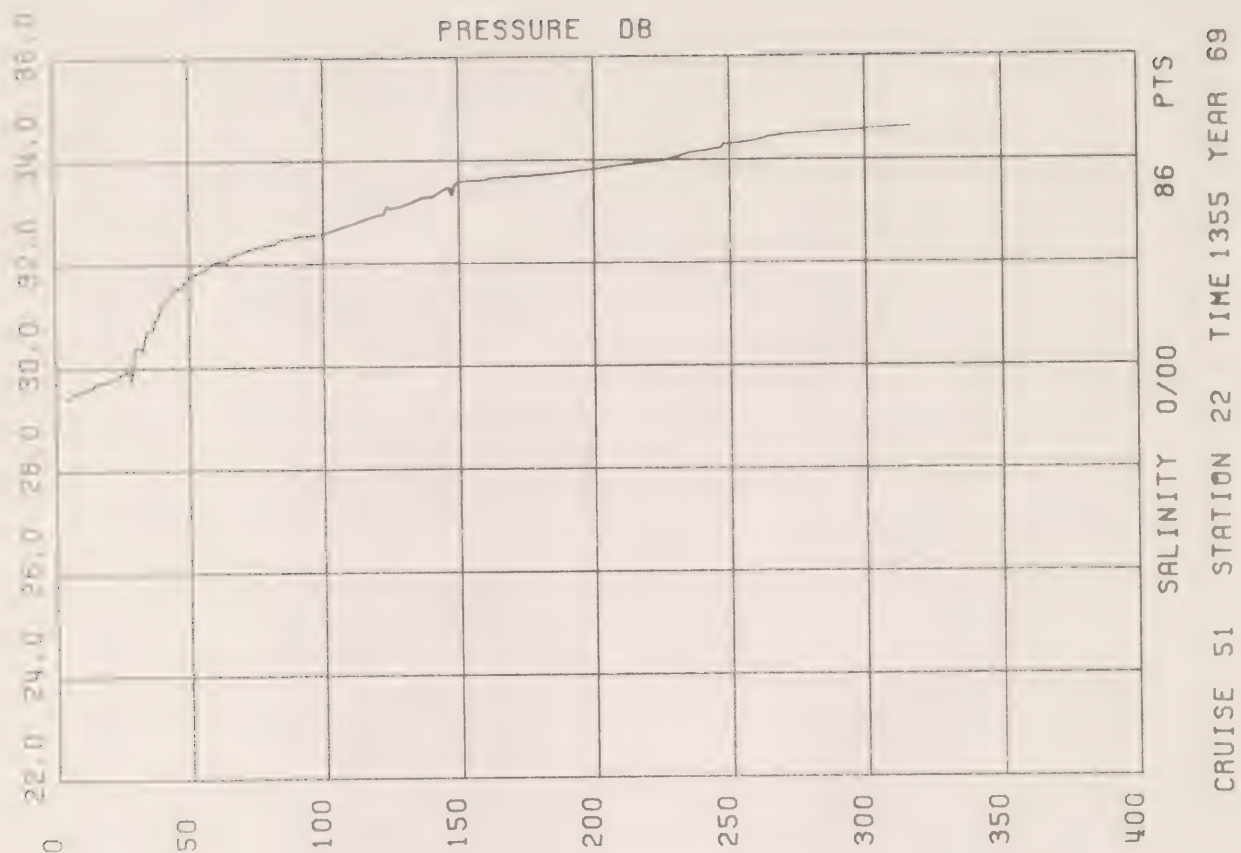
COUN
 INST
 RESTR
 UNAS

18
 10
 03R

WW
 CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	6.246A	6.245	30.651B	2412	2412	1470.5A	31	2	3808
	20.0	20.2A	4.458C	4.457	31.180A	2473	2473	1463.9A	67	7	3228
	30.0	30.2A	2.097A	2.096	31.528A	2522	2522	1454.4A	96	15	2765
	50.0	50.4A	0.655A	0.653	31.958A	2565	2565	1448.9A	147	36	2352
	75.0	75.5	0.480	0.477	32.336	2596	2596	1449.0	203	71	2054
	100.0	100.7A	1.141A	1.137	32.663A	2619	2619	1452.9A	253	116	1842
	125.0	125.9	1.690	1.684	33.007	2642	2642	1456.2	295	165	1617
	150.0	151.0A	2.394A	2.386	33.444A	2672	2672	1460.3A	332	217	1340
	175.0	176.2A	3.592A	3.580	33.864A	2695	2695	1466.5A	364	269	1132
	200.0	201.4A	3.792A	3.778	34.094A	2711	2711	1468.0W	390	320	979
	225.0	226.6A	4.371A	4.354	34.324A	2723	2723	1471.2A	413	370	969
	250.0	251.8A	4.450W	4.431	34.416A	2730	2730	1472.1A	435	422	812



LAT N49 30.00
 LONG W 64 30.00
 DEPTH 1357.0
 MARSD SQ

YEAR 1969
 MONTH 9
 DAY 23
 H/M 1357

WAVE-P/H 0501
 SWEL-P/H 070
 SWEL-D 1013.2
 BARO 1013.2
 WET-BLB

WIND-DIR 120
 WIND-SPD 04
 AIR-TEM
 WET-BLB

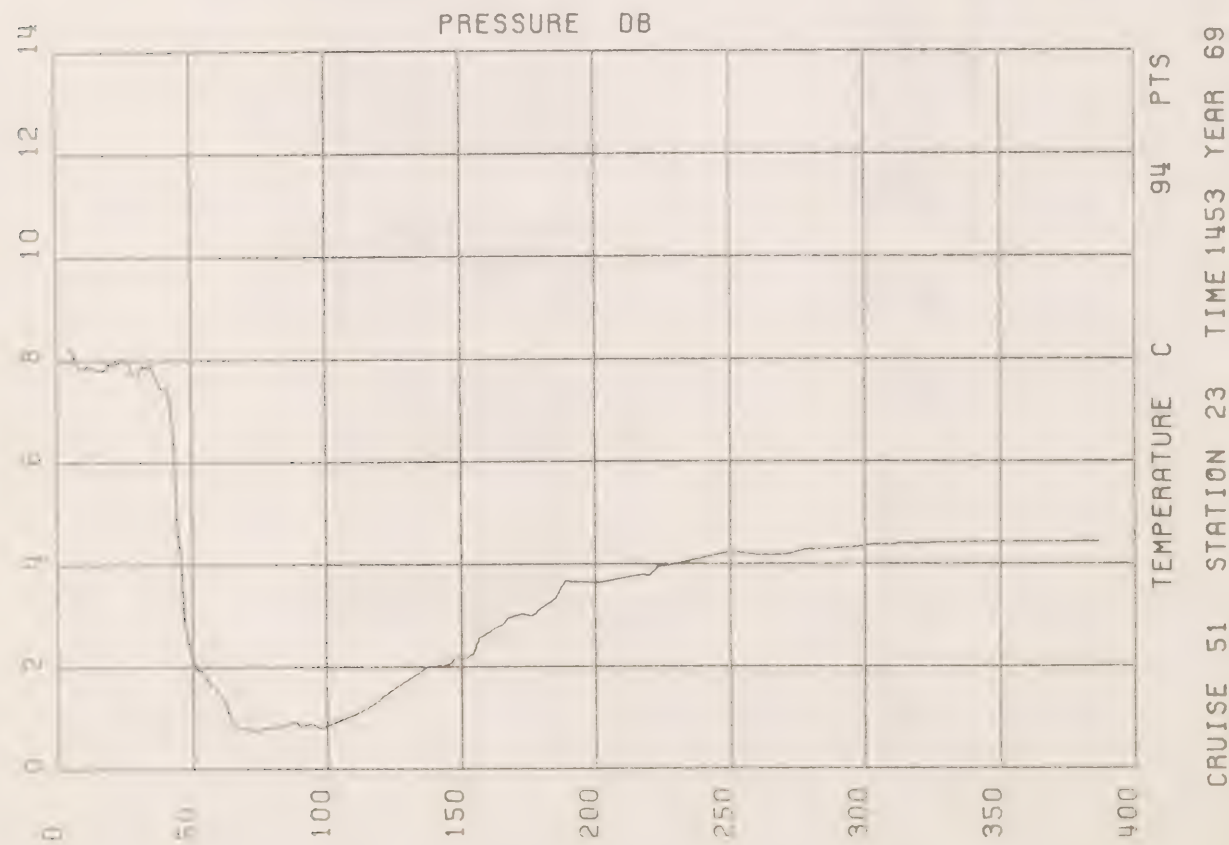
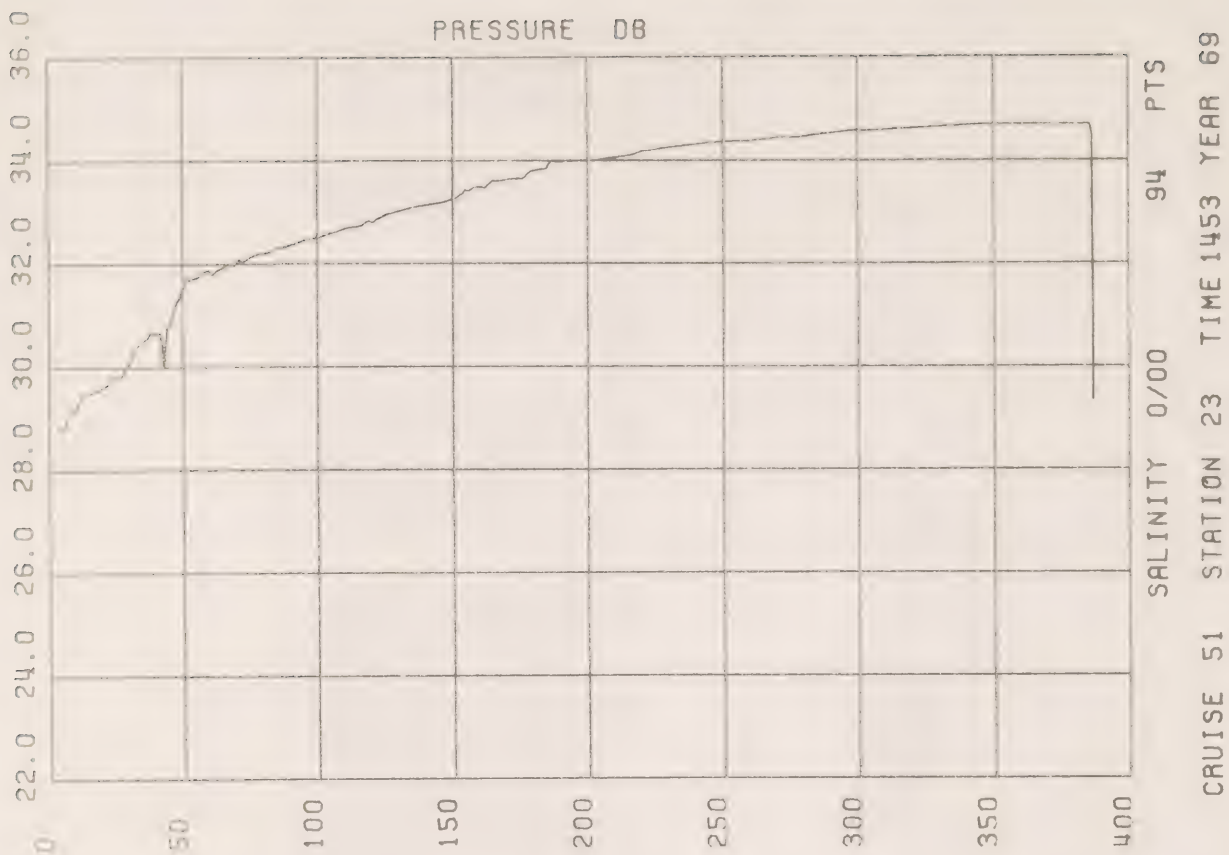
WW 45
 CLD-A

COUN 18
 INST 10
 RESTR
 UNAS 03A

CRUISE NUMBER 69051 STATION NUMBER 022

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
10.0	10.0	10.1A	8.845B	8.844	29.563A	2292	2292	1479.3A	32	2	4956
20.0	20.0	20.2A	8.647W	8.645	29.748A	2309	2309	1478.9W	82	9	4791
30.0	30.0	30.2A	6.518D	6.515	30.443D	2392	2392	1471.5A	128	21	4004
50.0	50.0	50.4	1.420	1.418	31.766	2545	2545	1452.1	193	48	2542
75.0	75.0	75.5A	0.483A	0.480	32.328A	2595	2595	1449.0W	250	84	2060
100.0	100.0	100.7W	0.819A	0.815	32.587A	2614	2614	1451.4A	300	129	1881
125.0	125.0	125.9A	1.873A	1.867	33.073W	2646	2646	1457.2A	344	179	1582
150.0	150.0	151.0A	2.608C	2.599	33.597B	2682	2682	1461.4A	380	230	1241
175.0	175.0	176.2A	2.749A	2.739	33.695A	2689	2689	1462.6A	410	281	1182
200.0	200.0	201.4A	3.005A	2.992	33.836A	2698	2698	1464.3A	438	336	1099
225.0	225.0	226.6A	3.379B	3.363	33.995A	2707	2707	1465.5A	465	394	1015
250.0	250.0	251.8A	4.138B	4.120	34.319A	2725	2725	1470.7A	489	450	851
300.0	300.0	302.2W	4.450W	4.427	34.596W	2744	2744	1473.1W	526	557	682

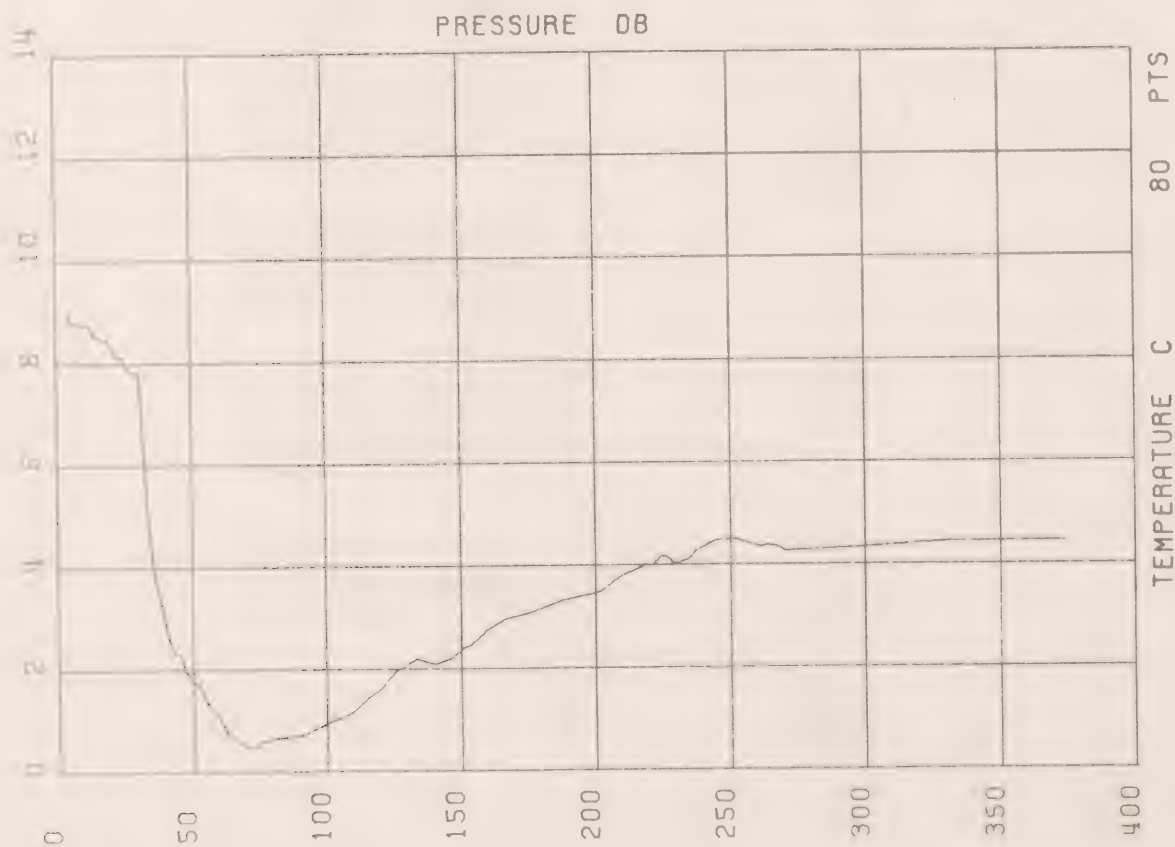
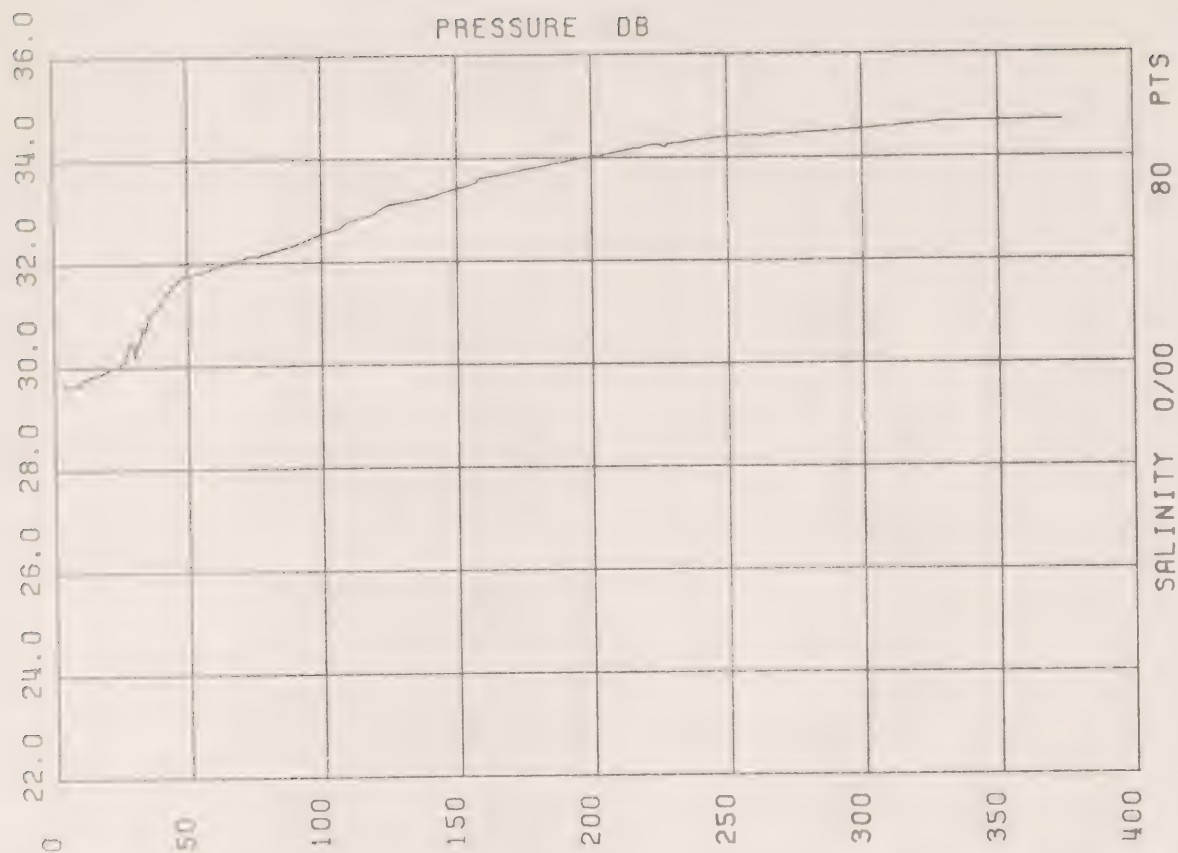


CRUISE NUMBER 69051 STATION NUMBER 023

LAT	N 49	20.00	YEAR	1969	WAVE-P/H		WIND-DIR		COUN	18
LONG	W 64	30.00	MONTH	9	SWEL-P/H		WIND-SPD		INST	10
DEPTH		388.0	DAY	23	SWEL-D		AIR-TEM	8.9	RESTR	
MARSD	SQ		H/M	1459	BARO	1012.9	WET-BLB	8.3	UNAS	04A

INTERPOLATED

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	7.849W	7.848	29.196A	2277	2277	1474.9W	36	2	5092
	20.0	20.2A	7.882A	7.880	29.592B	2307	2307	1475.8A	86	10	4804
	30.0	30.2A	7.740E	7.737	30.067A	2347	2347	1476.1W	132	223	4427
	50.0	50.4A	2.022W	2.016	31.567A	2525	2525	1454.5W	209	53	2731
	75.0	75.5A	0.789B	0.786	32.141A	2578	2578	1450.1A	270	92	2221
	100.0	100.7	0.860	0.856	32.512	2608	2608	1451.4	323	139	1941
	125.0	125.9	1.600	1.594	32.954	2639	2639	1455.7	368	191	1651
	150.0	151.0A	2.149A	2.141	33.260A	2659	2659	1459.0A	407	247	1460
	175.0	176.2	2.960	2.949	33.646	2683	2683	1463.5	440	301	1237
	200.0	201.4A	3.620A	3.606	33.997A	2705	2705	1467.2A	468	354	1036
	225.0	226.6A	3.950A	3.934	34.220A	2719	2720	1469.3A	492	408	904
	250.0	251.8A	4.240B	4.222	34.368A	2728	2728	1471.1A	514	459	826
	300.0	302.2A	4.369A	4.346	34.569A	2743	2743	1472.8A	552	568	693

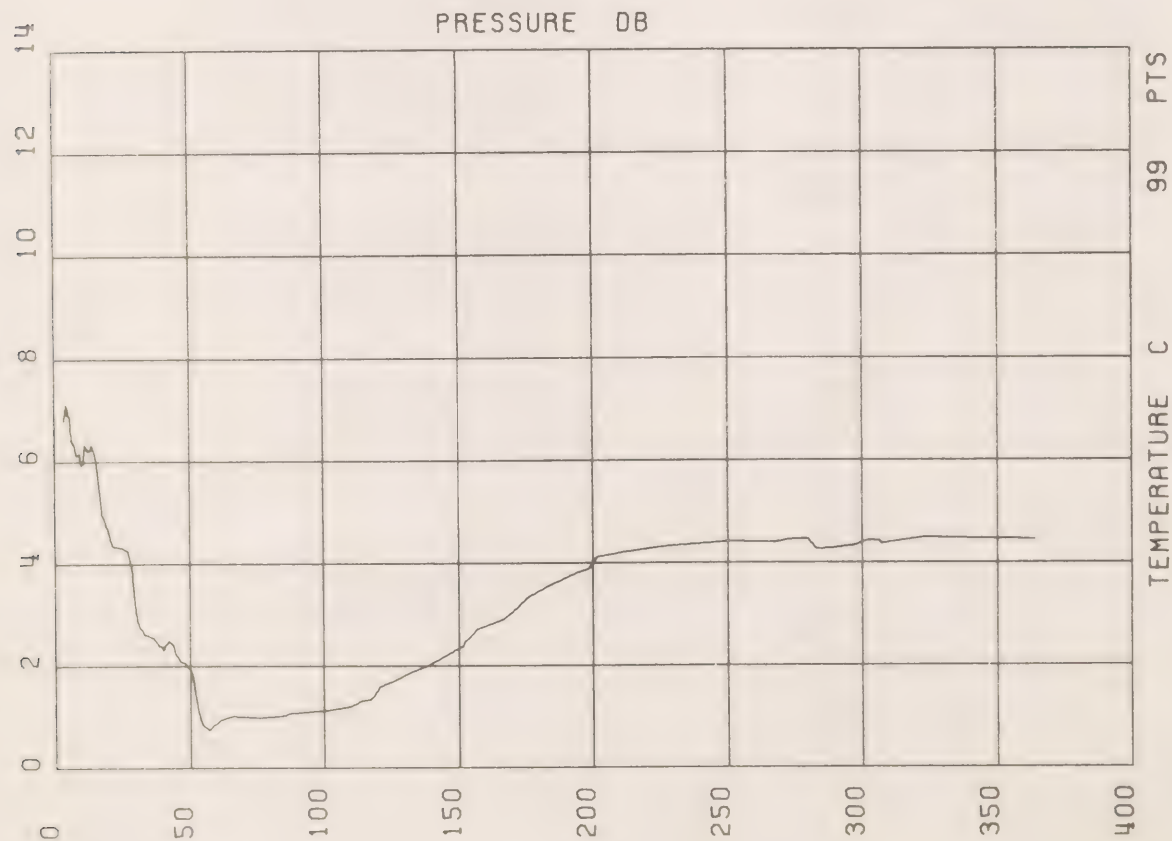
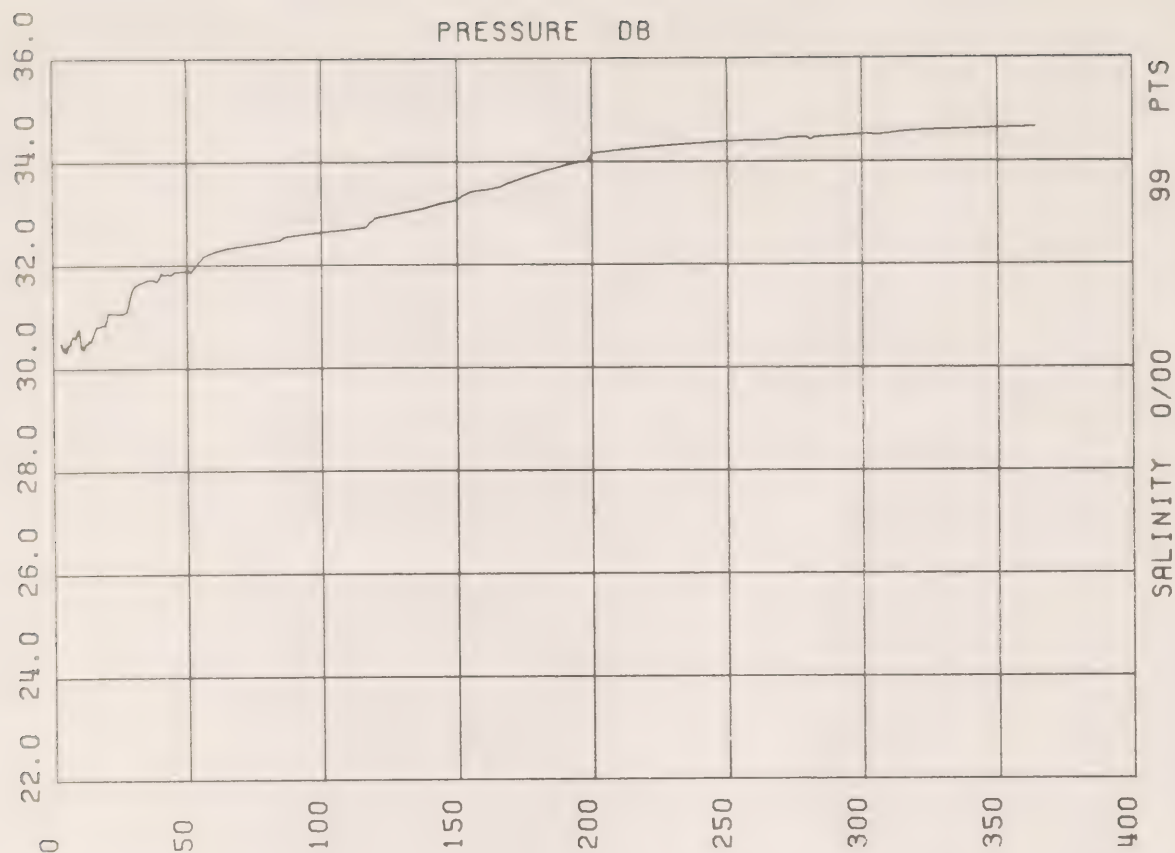


LAT		N49	20.00	YEAR	1969	WAVE-P/H	0301	WIND-DIR	120	WW	45	COUN	18
LONG		W 64	15.00	MONTH	9	SWEL-P/H	0502	WIND-SPD	05	CLD-A		INST	10
DEPTH			384.0	DAY	23	SWEL-D	070	AIR-TEM	9.0			RESTR	
MARSD		SQ		H/M	1600	BARO	1012.6	WET-BLB	8.4			UNAS	048

CRUISE NUMBER 69051 STATION NUMBER 024

I N T E R P O L A T E D

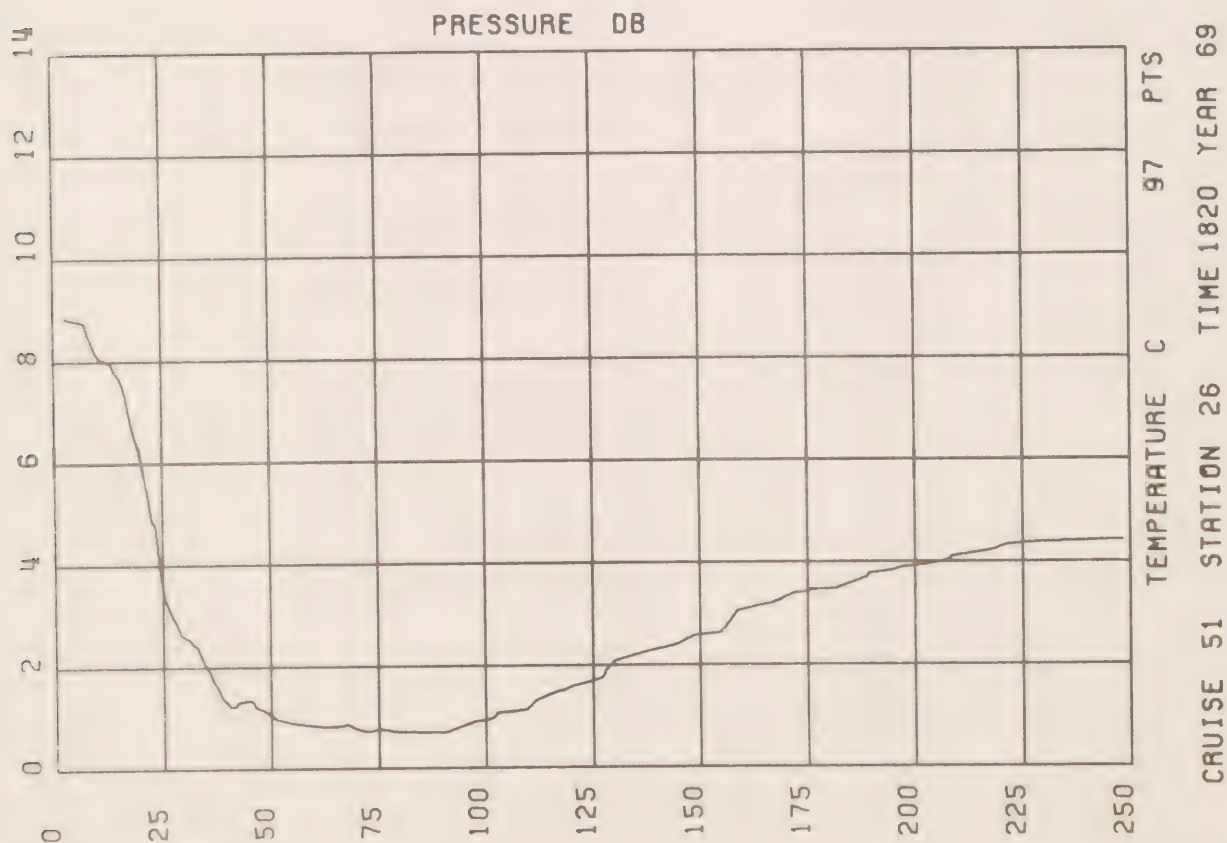
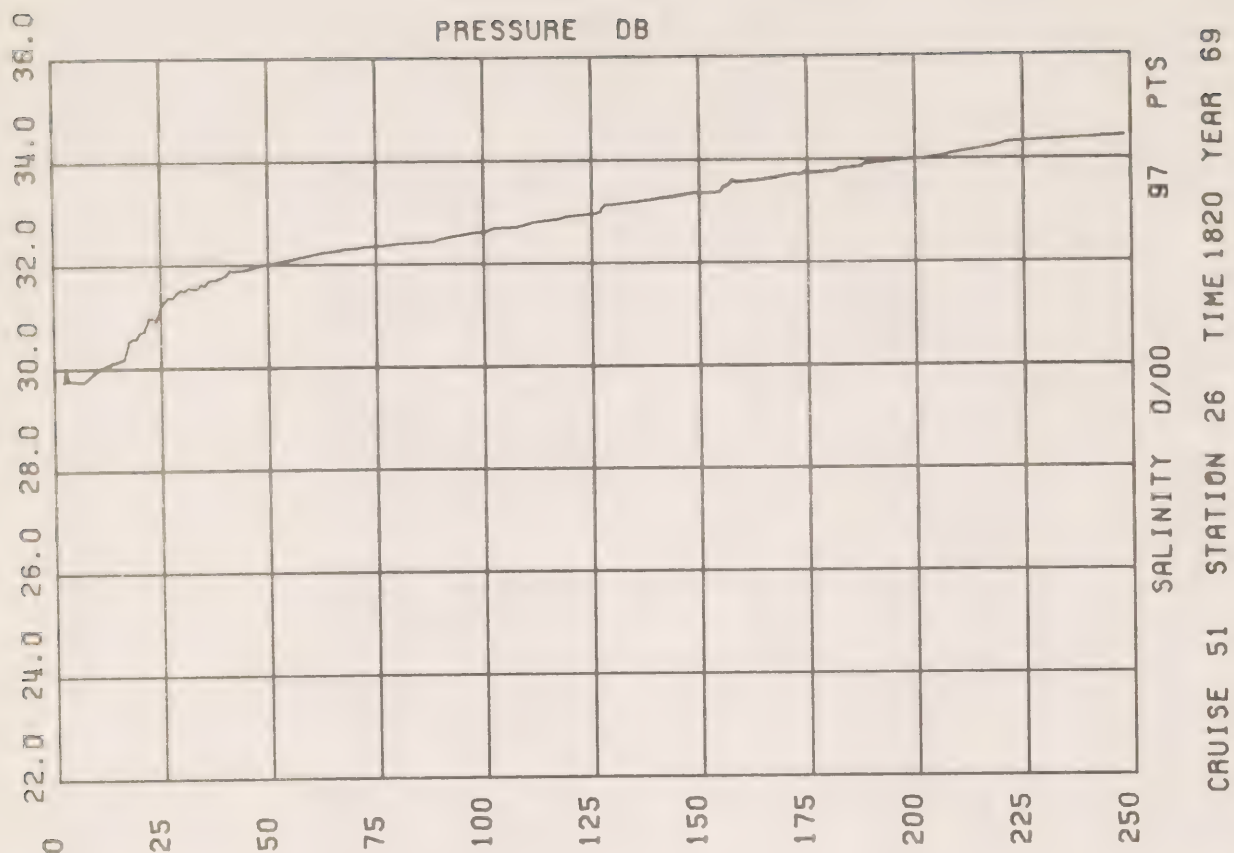
GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.716E	8.715	29.742D	2306	2306	1479.0A	29	2	4819
	20.0	20.2A	8.311B	8.309	29.928C	2328	2328	1477.9W	78	10	4612
	30.0	30.2A	7.789E	7.786	30.285W	2364	2364	1476.4A	121	21	4244
	50.0	50.4A	1.739B	1.737	31.774A	2543	2543	1453.5A	185	46	2557
	75.0	75.5A	0.599A	0.596	32.139A	2579	2579	1449.3A	244	84	2211
	100.0	100.7A	0.974A	0.970	32.554A	2610	2610	1452.0A	296	131	1914
	125.0	125.9A	1.982A	1.976	33.112A	2649	2649	1457.6A	340	182	1555
	150.0	151.0A	2.402A	2.393	33.421A	2670	2670	1460.4A	378	234	1359
	175.0	176.2A	3.085A	3.074	33.780A	2692	2693	1464.2A	408	286	1147
	200.0	201.4A	3.467A	3.454	34.030A	2709	2709	1466.5A	436	337	995
	225.0	226.6A	4.125A	4.109	34.214B	2717	2717	1470.0A	459	389	925
	250.0	251.8A	4.487A	4.468	34.410A	2729	2729	1472.2A	481	442	822
	300.0	302.2A	4.332W	4.309	34.551A	2741	2742	1472.6A	519	549	703



LAT N49 20.00
 LONG W 64 0.00
 DEPTH 374.0
 MARSD SQ
 YEAR 1969
 MONTH 9
 DAY 23
 H/M 1727
 CRUISE NUMBER 69051
 STATION NUMBER 025
 WAVE-P/H 0301
 SWEL-P/H 0502
 SWEL-D 090
 BARO
 WIND-DIR 140
 WIND-SPD 04
 AIR-TEM 8.4
 WET-BLB 8.0
 WW 45
 CLD-A
 COUN 18
 INST 10
 RESTR
 UNAS 04C

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1	5.940	5.939	30.773	2425	2425	1469.4	28	2	3683
	20.0	20.2A	4.449A	4.448	30.854A	2448	2448	1463.5A	66	8	3468
	30.0	30.2A	2.830C	2.828	31.545A	2517	2517	1457.7A	99	16	2906
	50.0	50.4A	1.882C	1.880	31.907B	2553	2553	1454.3A	151	38	2463
	75.0	75.5	0.980	0.977	32.405	2599	2599	1451.4	205	72	2029
	100.0	100.7	1.12C	1.116	32.640	2617	2617	1452.8	254	116	1858
	125.0	125.9A	1.697A	1.691	32.975A	2639	2639	1456.2A	299	168	1642
	150.0	151.0A	2.335B	2.327	33.282A	2660	2660	1459.9A	338	223	1457
	175.0	176.2A	3.339A	3.328	33.712A	2685	2685	1465.2A	372	279	1232
	200.0	201.4	4.110	4.096	34.171	2714	2714	1469.5	400	332	954
	225.0	226.6A	4.304A	4.287	34.308A	2723	2723	1470.9A	423	381	874
	250.0	251.8A	4.410A	4.391	34.402A	2729	2729	1471.9A	444	434	818
	300.0	302.2A	4.422A	4.399	34.529A	2739	2739	1472.9A	483	544	729

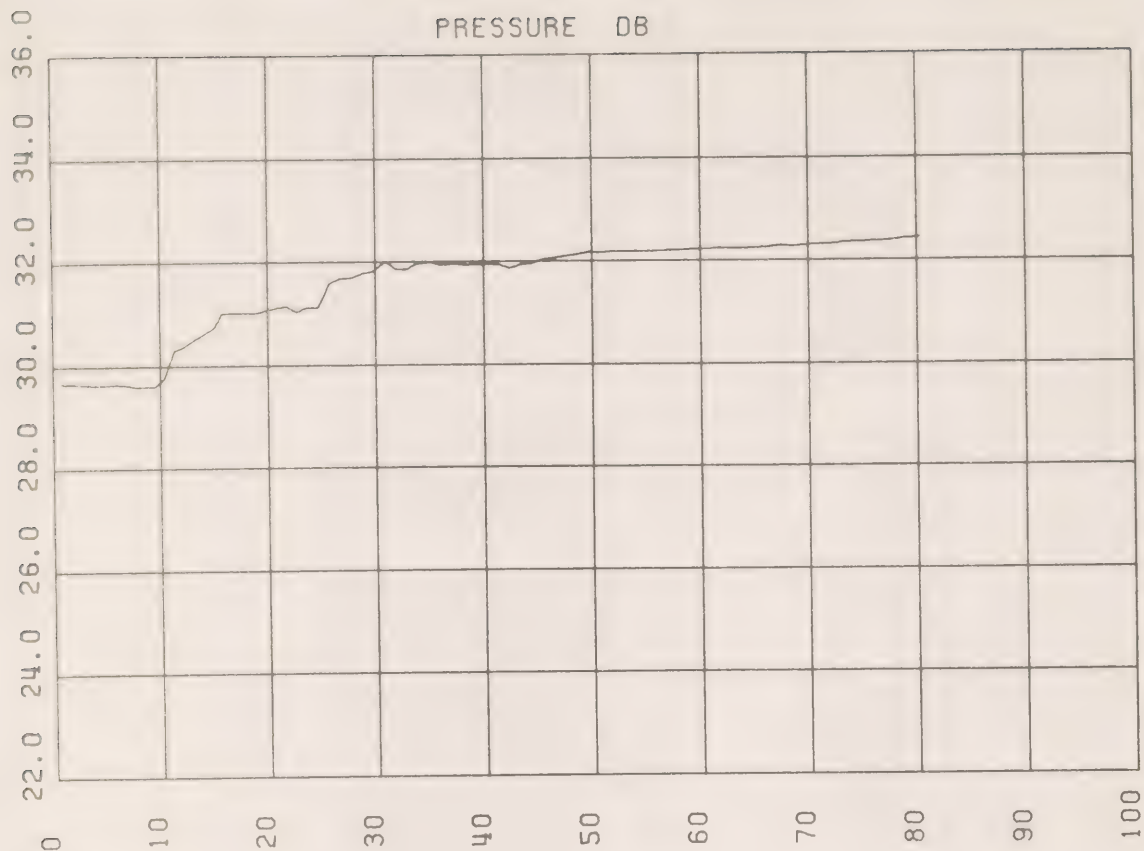


CRUISE NUMBER 69051 STATION NUMBER 026
 LAT N49 20.00 YEAR 1969 WAVE-P/H WIND-DIR 240 WW 45
 LONG W 63 45.00 MONTH 9 SWEL-P/H 0502 WIND-SPD 03 CLD-A 9
 DEPTH 262.0 DAY 23 SWEL-D 090 AIR-TEM 9.0
 MARSQ SQ H/M 1820 BARO 1011.7 WET-BLB 8.4
 COUN 18
 INST 10
 RESTR
 UNAS 04D

I N T E R P O L A T E D

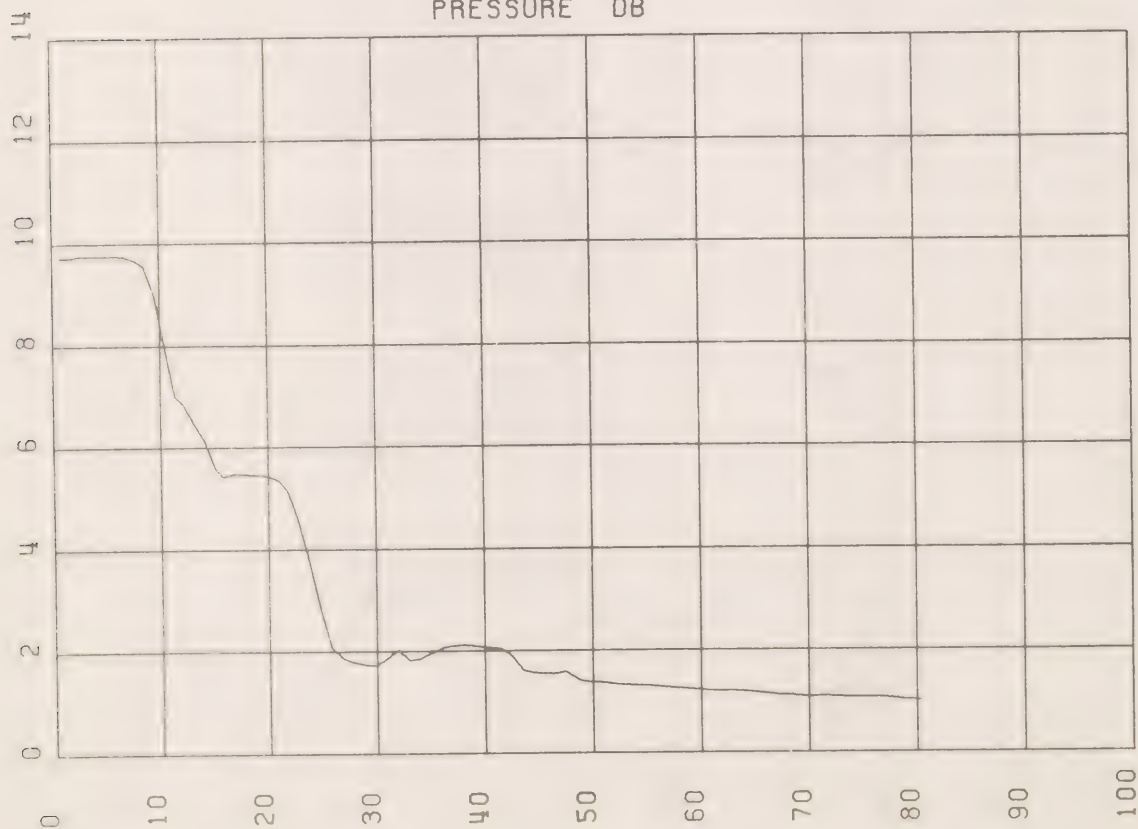
GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.070A	8.069	29.968A	2335	2335	1476.8A	37	2	4545
	20.0	20.2A	5.885A	5.883	30.694A	2419	2419	1469.3A	81	9	3737
	30.0	30.2A	2.568B	2.566	31.507C	2516	2516	1456.5A	113	17	2815
	50.0	50.4A	1.012A	1.010	32.017A	2567	2567	1450.6A	164	38	2326
	75.0	75.5	0.770	0.767	32.353	2596	2596	1450.4	218	73	2056
	100.0	100.7A	0.941A	0.937	32.625A	2616	2616	1451.9A	267	117	1858
	125.0	125.9A	1.723A	1.717	32.965A	2638	2638	1456.3A	311	167	1651
	150.0	151.0A	2.583A	2.574	33.353A	2663	2663	1461.0A	349	221	1425
	175.0	176.2A	3.454E	3.443	33.748A	2686	2687	1465.7A	382	274	1204
	200.0	201.4	3.910	3.896	33.995	2702	2702	1468.4	410	329	1065
	225.0	226.6W	4.361W	4.344	34.343W	2725	2725	1471.2W	433	381	855

PRESSURE DB



SALINITY 0/00
 CRUISE 51 STATION 27 TIME 1911 YEAR 69

PRESSURE DB

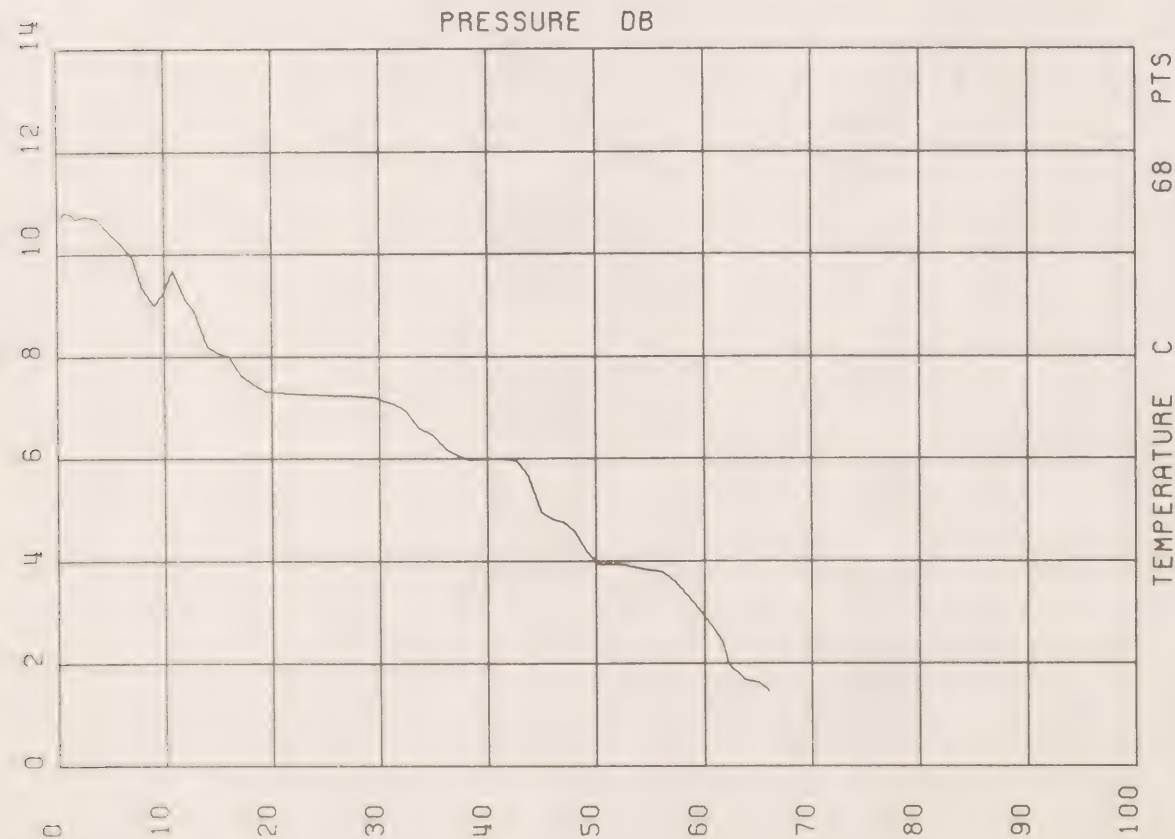
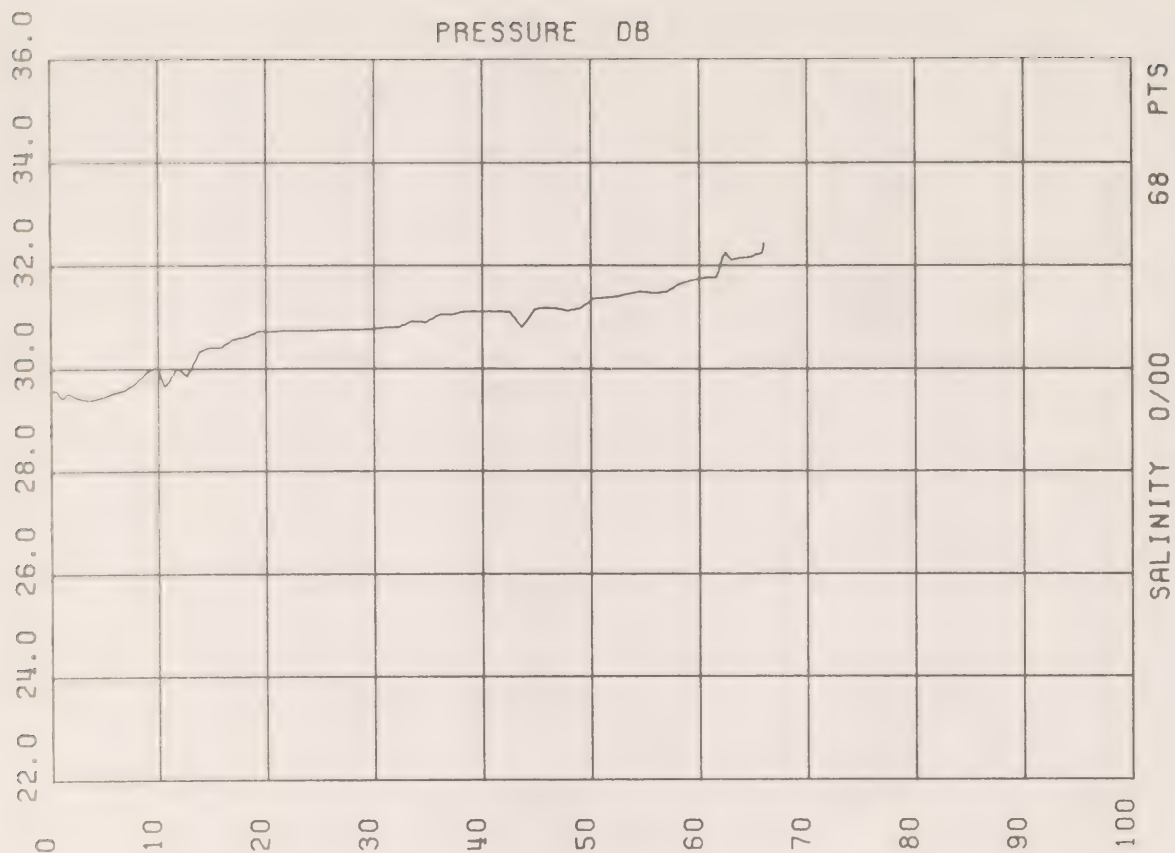


TEMPERATURE C
 CRUISE 51 STATION 27 TIME 1911 YEAR 69

LAT N49 20.00
 LONG W 63 30.00
 DEPTH 84.0
 MARSD SQ
 YEAR 1969
 MONTH 9
 DAY 23
 H/M 1911
 WAVE-P/H
 SWEL-P/H
 SWEL-D
 BARO
 WIND-DIR
 WIND-SPD
 AIR-TEM
 WET-BLB
 COUN 18
 INST 10
 RESTR
 UNAS 04E
 CRUISE NUMBER 69051
 STATION NUMBER 027
 WW
 CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.362C	8.361	29.669C	2307	2307	1477.6A	47	3	4809
	20.0	20.2A	5.424A	5.422	31.088A	2455	2455	1467.8W	85	8	3390
	30.0	30.2A	1.753C	1.753	31.859C	2550	2550	1453.5W	115	16	2491
	50.0	50.4A	1.390A	1.388	32.165A	2577	2577	1452.5W	164	36	2236
	75.0	75.5A	1.070W	1.067	32.363A	2595	2595	1451.7W	218	71	2065



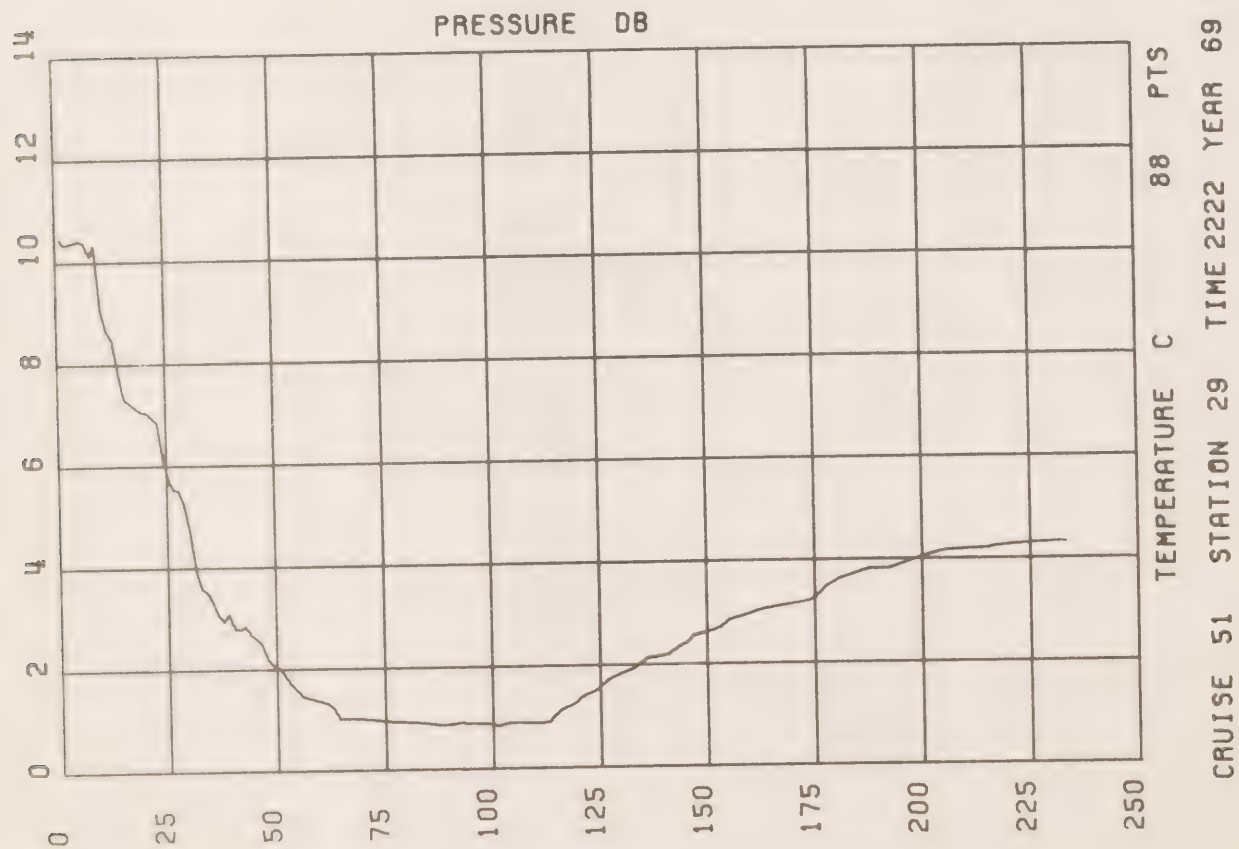
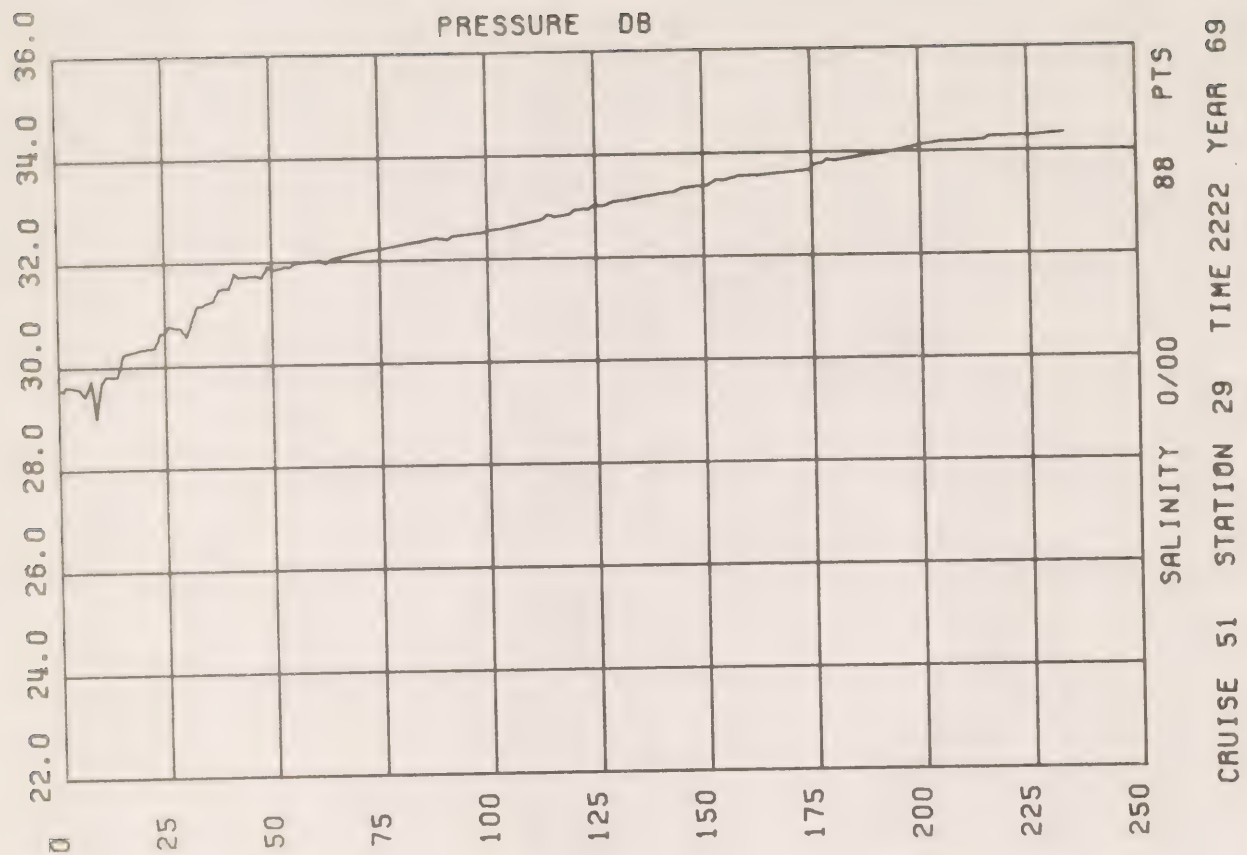
CRUISE NUMBER 69051 STATION NUMBER 028

LAT	N49	10.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 63	0.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		70.0	DAY	23	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	2051	EARO	WET-BLB	UNAS	05G

89

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	9.389D	9.388	29.957D	2311	2311	1481.8A	50	3	4741
	20.0	20.2A	7.304A	7.302	30.719A	2404	2404	1475.0W	94	9	3888
	30.0	30.2	7.140	7.137	30.777	2410	2410	1474.6	132	19	3824
	50.0	50.4A	3.931W	3.928	31.366A	2493	2493	1462.5W	202	48	3035

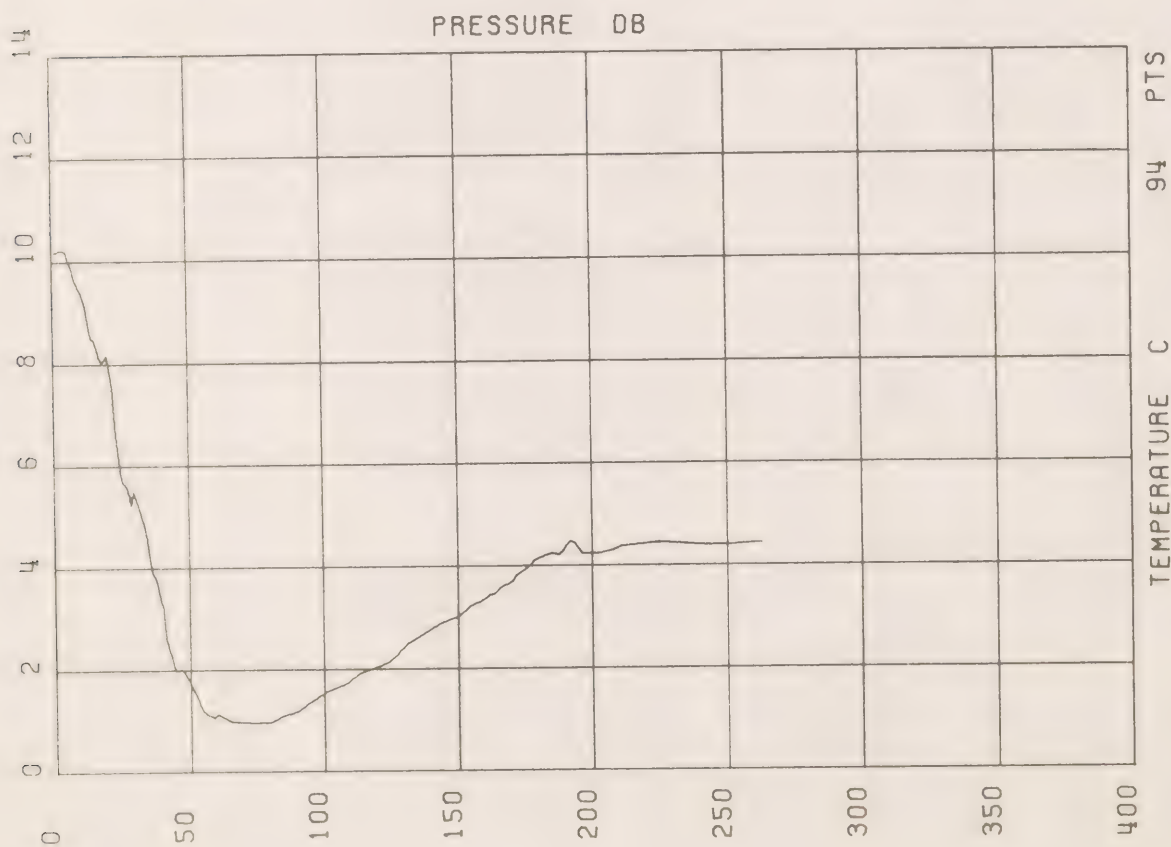
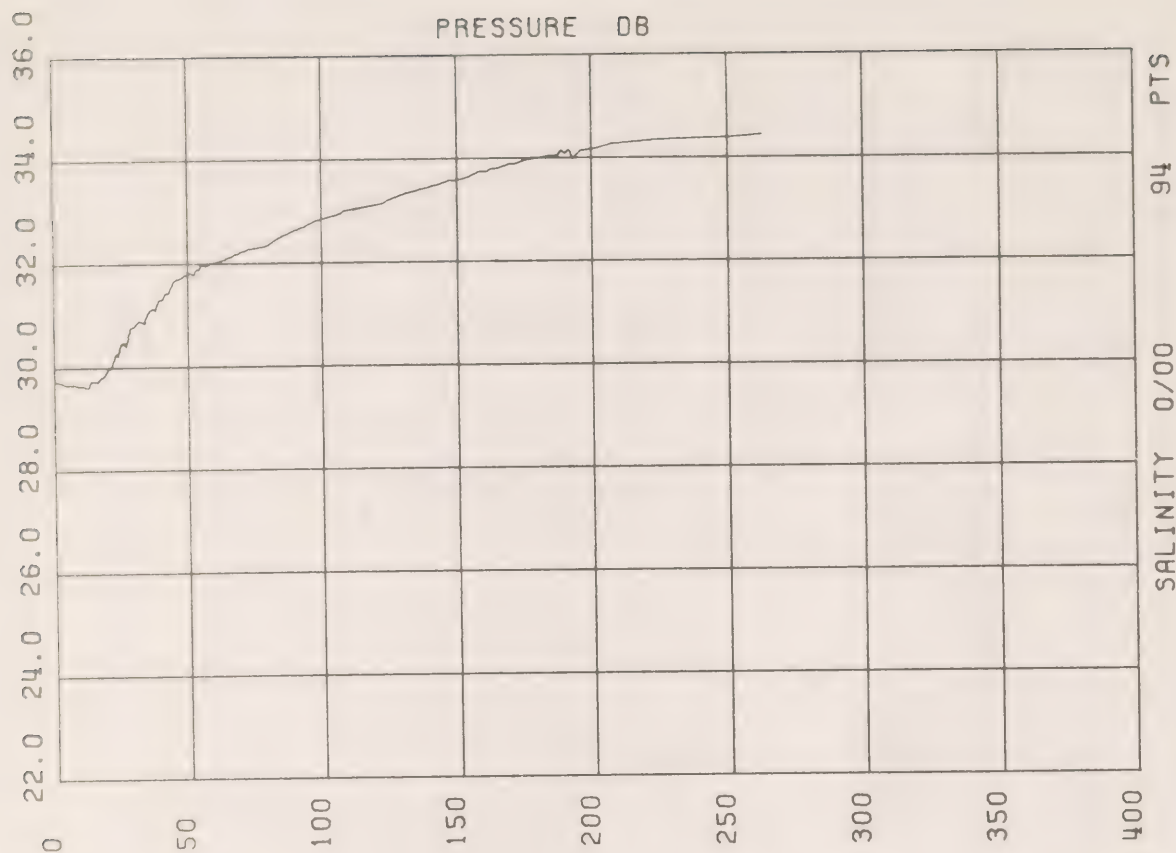


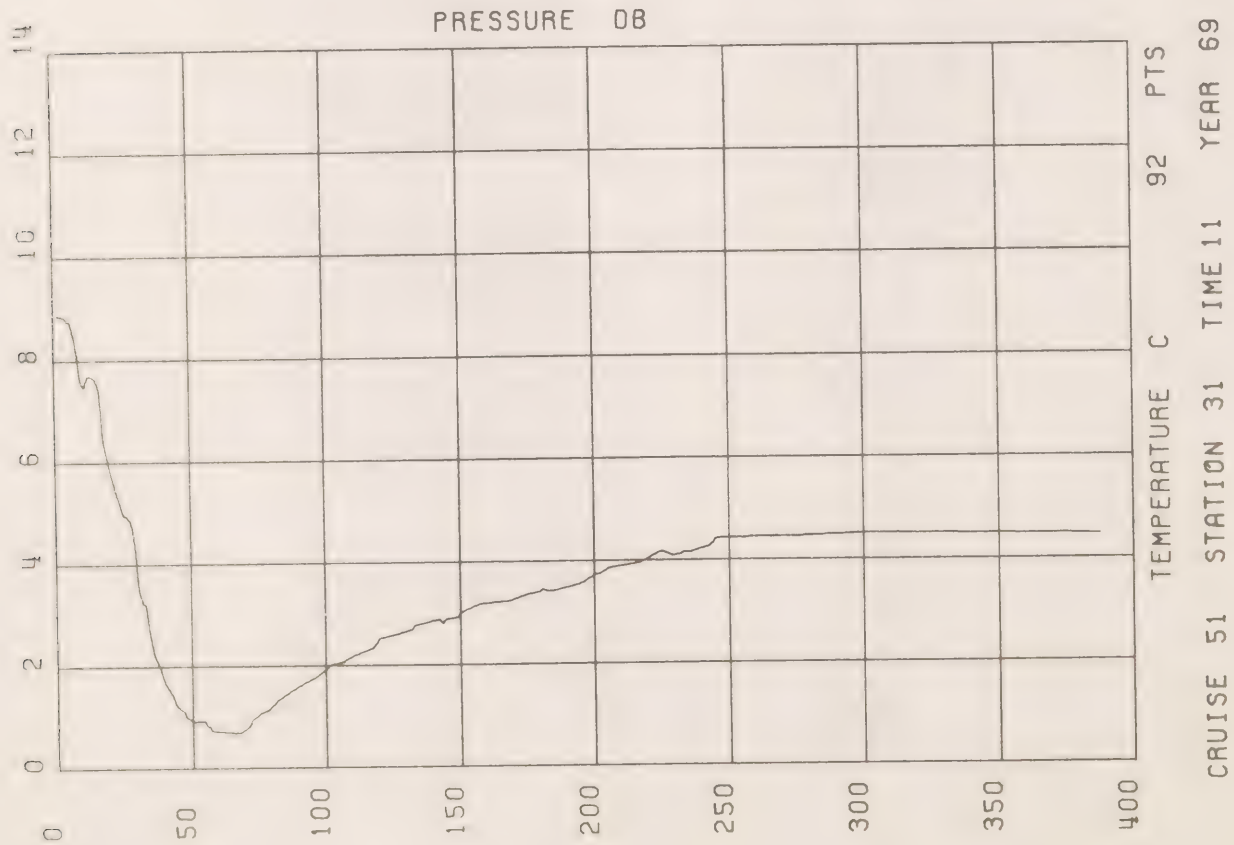
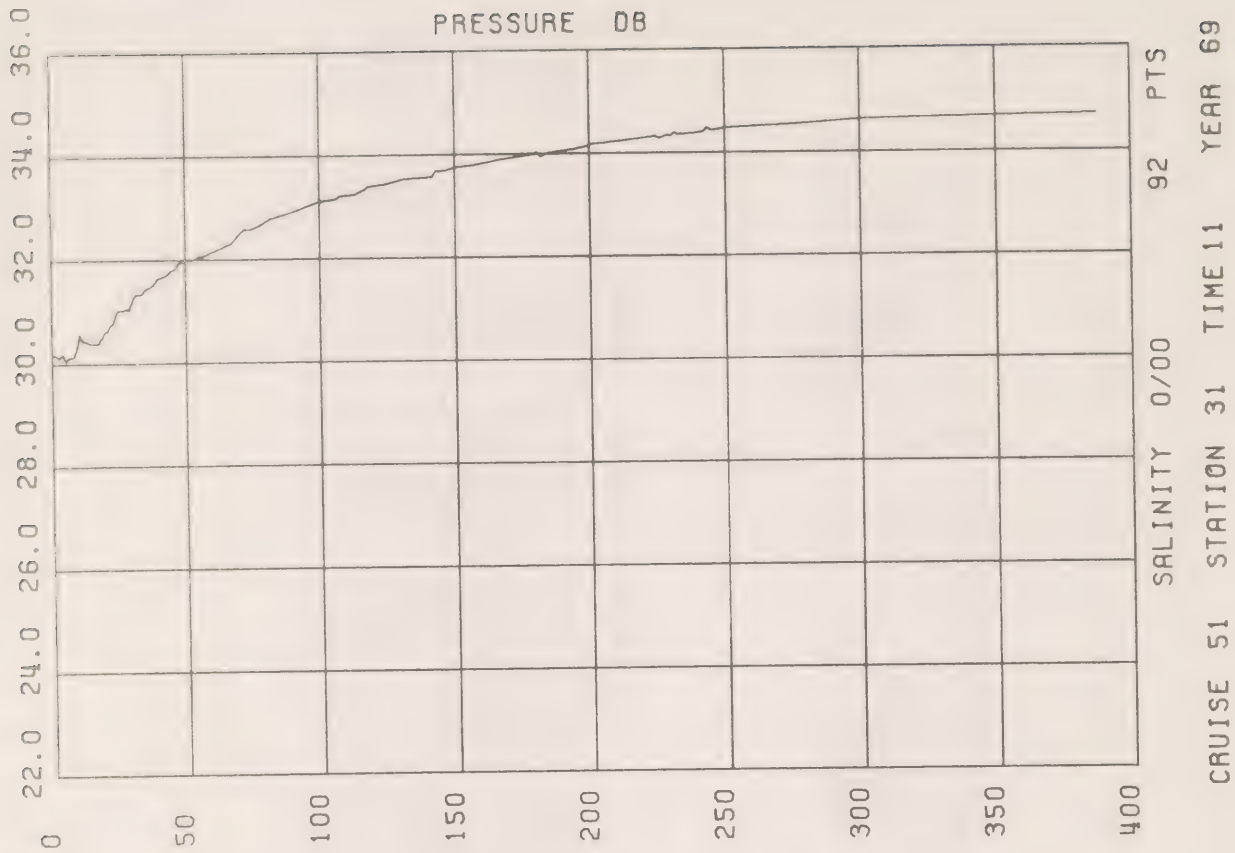
CRUISE NUMBER 69051 STATION NUMBER 029

LAT N49 10.00 YEAR 1969 WAVE-P/H WIND-DIR WIND-SPD WIND-TEMP WIND-BLUB
 LONG W 63 15.00 MONTH 9 SWEL-P/H SWEL-D BARO WET-BLUB
 DEPTH 242.0 DAY 23 H/M 2141
 MARSQ SQ COUN 18 INST 10 RESTR 05F UNAS

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1	9.060	9.059	29.706	2300	2300	1480.3	48	3	4879
	20.0	20.2A	7.037B	7.035	30.338A	2377	2377	1473.4A	93	9	4139
	30.0	30.2A	4.661A	4.659	30.580B	2424	2424	1464.2A	131	19	3694
	50.0	50.4A	2.035A	2.033	31.837B	2546	2546	1454.9A	189	43	2527
	75.0	75.5A	0.957A	0.954	32.231A	2584	2584	1451.0W	247	80	2159
	100.0	100.7	0.830	0.826	32.567	2612	2612	1451.3	298	125	1897
	125.0	125.9A	1.652B	1.646	33.014A	2643	2643	1456.1A	342	176	1609
	150.0	151.0A	2.637A	2.628	33.377A	2665	2665	1461.3A	380	229	1408
	175.0	176.2A	3.356A	3.345	33.783A	2690	2690	1465.4A	412	283	1170
	200.0	201.4A	4.078A	4.064	34.136A	2712	2712	1469.3A	440	336	978
	225.0	226.6W	4.292W	4.275	34.286W	2721	2721	1470.8W	463	387	890



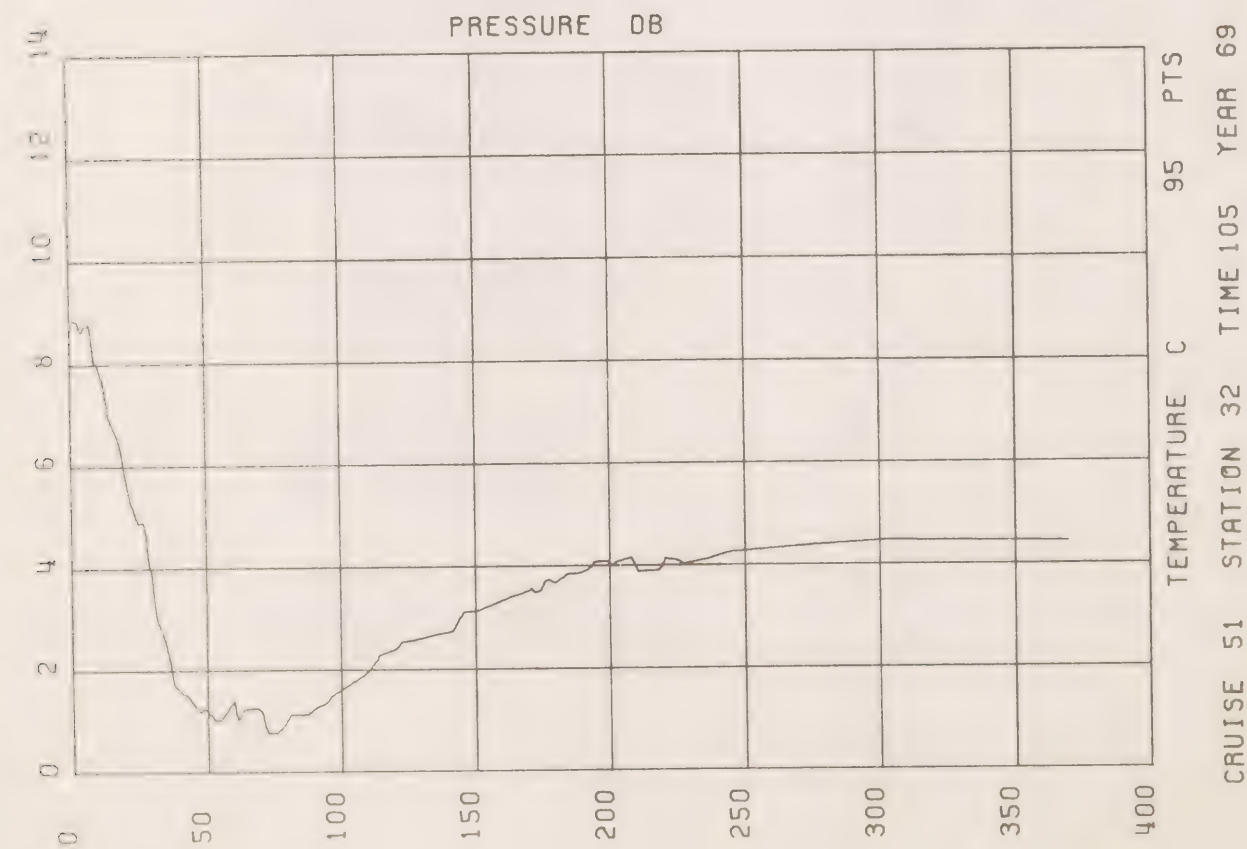
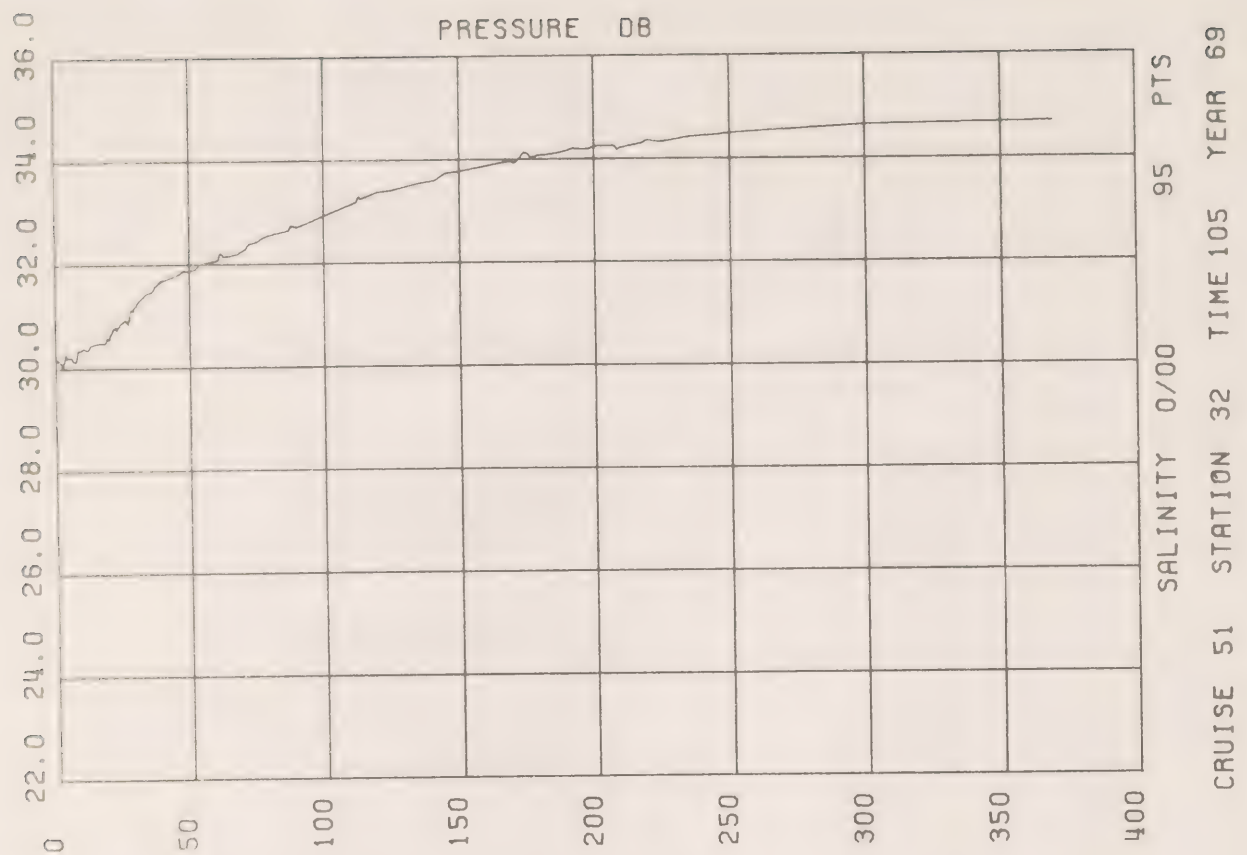


CRUISE NUMBER 69051 STATION NUMBER 031

LAT	N49	10.00	YEAR	1969	WAVE-P/H	WIND-DIP	WW	COUN	18
LONG	W 63	45.00	MONTH	9	SWEL-P/H	WIND-SPD	CLD-A	INST	10
DEPTH		388.0	DAY	24	SWEL-D	AIR-TEM		RESTR	050
MARSD	SQ		H/M	0013	EARC	WET-BLB		UNAS	

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	7.439C	7.438	30.410W	2375	2375	1474.9A	41	3	4155
	20.0	20.2A	5.771A	5.769	30.623A	2415	2415	1468.7A	82	9	3778
	30.0	30.2	3.520	3.518	31.184	2482	2482	1460.2	117	17	3136
	50.0	50.4A	0.902C	0.900	31.979A	2565	2565	1450.1A	171	40	2349
	75.0	75.5	1.060	1.057	32.599	2614	2614	1452.0	225	74	1886
	100.0	100.7A	1.965A	1.960	33.112A	2649	2649	1457.1A	268	112	1557
	125.0	125.9A	2.586A	2.579	33.445A	2670	2670	1460.7A	305	154	1354
	150.0	151.0A	3.061C	3.052	33.758C	2692	2692	1463.6A	336	199	1156
	175.0	176.2A	3.360C	3.349	33.962A	2705	2705	1465.6A	364	245	1036
	200.0	201.4A	3.729A	3.715	34.174A	2718	2718	1467.9A	389	293	913
	225.0	226.6A	4.133W	4.118	34.280B	2722	2722	1470.2W	411	342	877
	250.0	251.8A	4.432A	4.413	34.479A	2734	2735	1472.0A	432	391	762
	300.0	302.2A	4.510A	4.487	34.634A	2746	2747	1473.4A	467	492	659

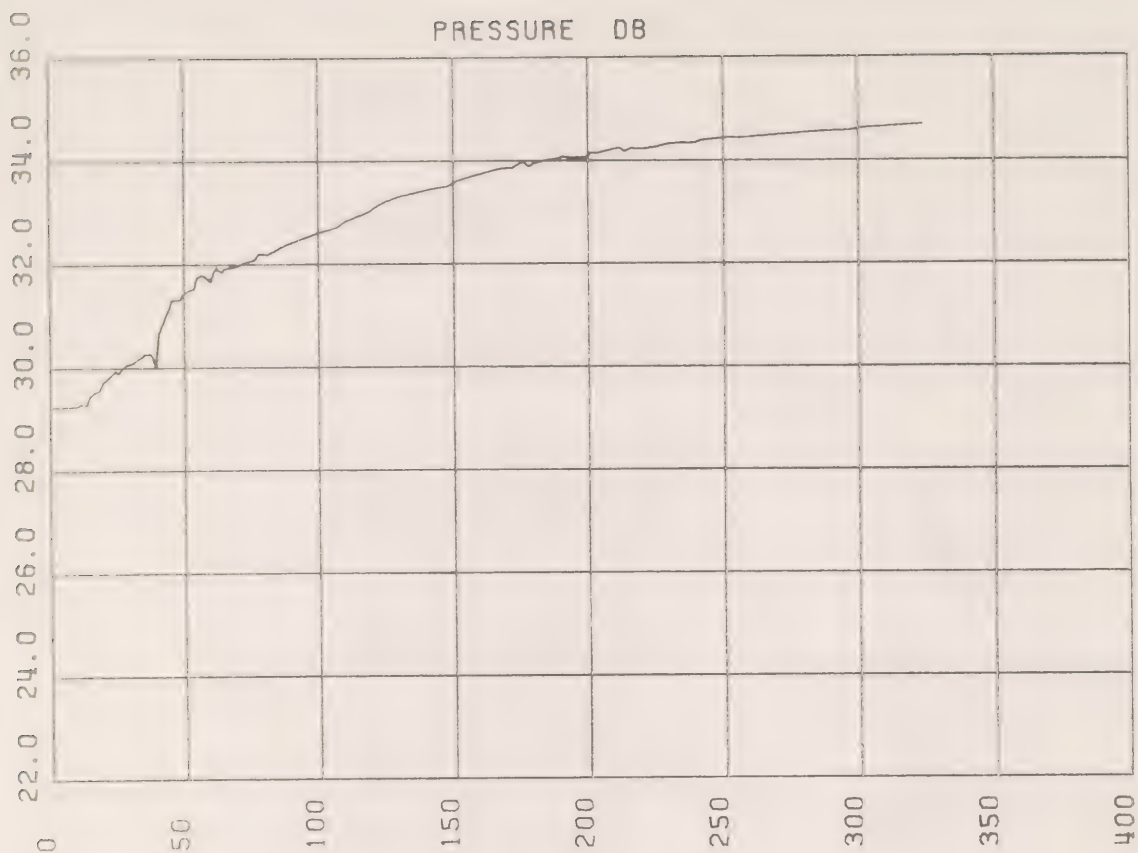


CRUISE NUMBER 69051 STATION NUMBER 032

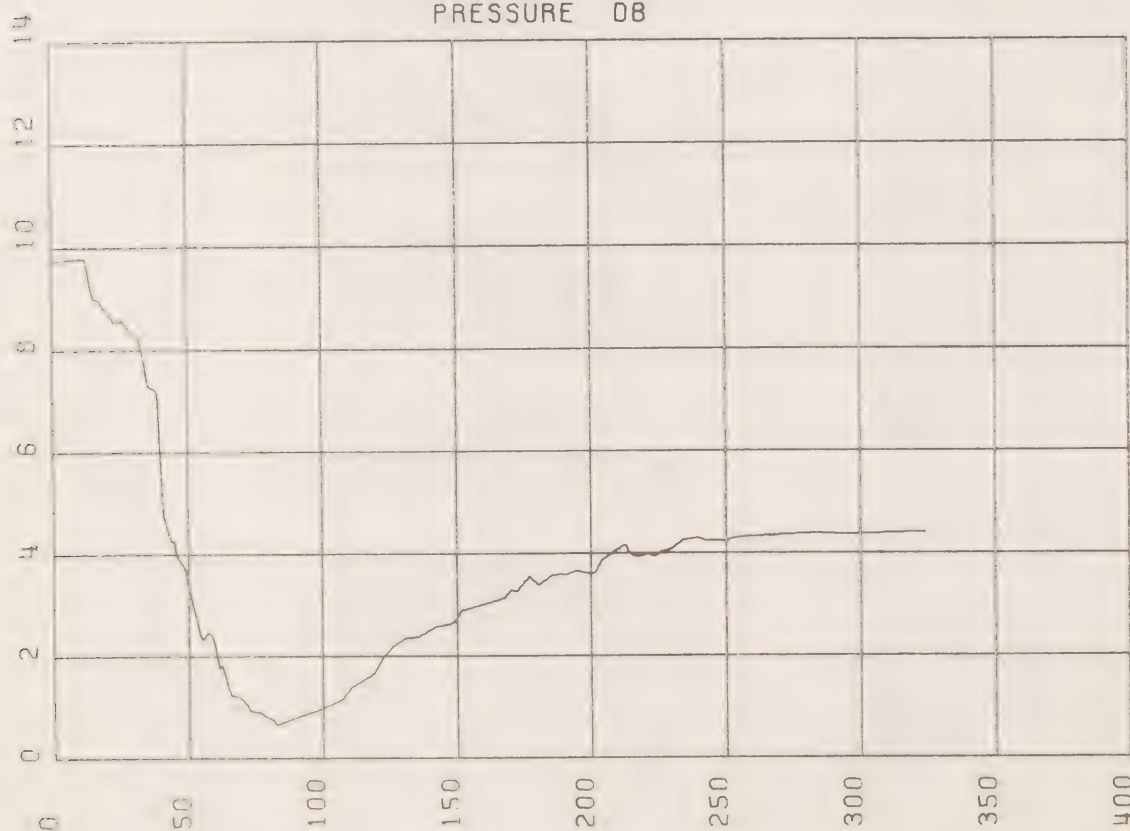
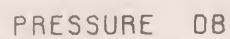
LAT N49 10.00 YEAR 1969 WAVE-P/H WIND-DIR W W COUN 18
 LONG W 64 0.00 MONTH 9 SWEL-P/H WIND-SPD W W CLD-A INST 10
 DEPTH 372.0 DAY 24 SWEL-D AIR-TEM 11.5 RESTR
 MARSD SQ H/M 0108 BARO WET-BLB 10.5 UNAS 05C

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	7.918B	7.917	30.355C	2367	2367	1476.9A	41	2	4237
	20.0	20.2	5.710	5.708	30.561	2411	2411	1468.4	82	9	3817
	30.0	30.2	3.490	3.488	31.195	2483	2483	1460.1	116	17	3125
	50.0	50.4A	1.172D	1.170	31.857A	2553	2553	1451.1A	170	39	2457
	75.0	75.5A	0.755A	0.752	32.436A	2602	2602	1450.4A	226	75	1991
	100.0	100.7A	1.622A	1.617	32.940A	2638	2638	1455.4A	273	117	1663
	125.0	125.9A	2.535A	2.528	33.414A	2668	2668	1460.4A	310	159	1373
	150.0	151.0A	3.129B	3.120	33.777A	2692	2692	1464.0A	342	204	1152
	175.0	176.2A	3.720A	3.708	34.048C	2708	2708	1467.3A	369	248	1002
	200.0	201.4A	4.026B	4.012	34.248W	2721	2721	1469.3A	393	295	887
	225.0	226.6A	4.004A	3.988	34.338A	2728	2728	1469.7A	414	343	821
	250.0	251.8A	4.271A	4.252	34.494A	2738	2738	1471.4A	434	390	734
	300.0	302.2W	4.460W	4.437	34.648W	2748	2748	1473.2W	468	487	644



	SALINITY	0/00	94	PTS
CRUISE 51	STATION 33	TIME 325	YEAR 69	



CRUISE	STATION	TEMPERATURE	C	94	PTS
69	325	33			

CRUISE NUMBER 69051 STATION NUMBER 033

LAT N49 10.00
 LONG W 64 15.00
 DEPTH 340.0
 MARSD SQ

YEAR 1969
 MONTH 9
 DAY 24
 H/M 0326

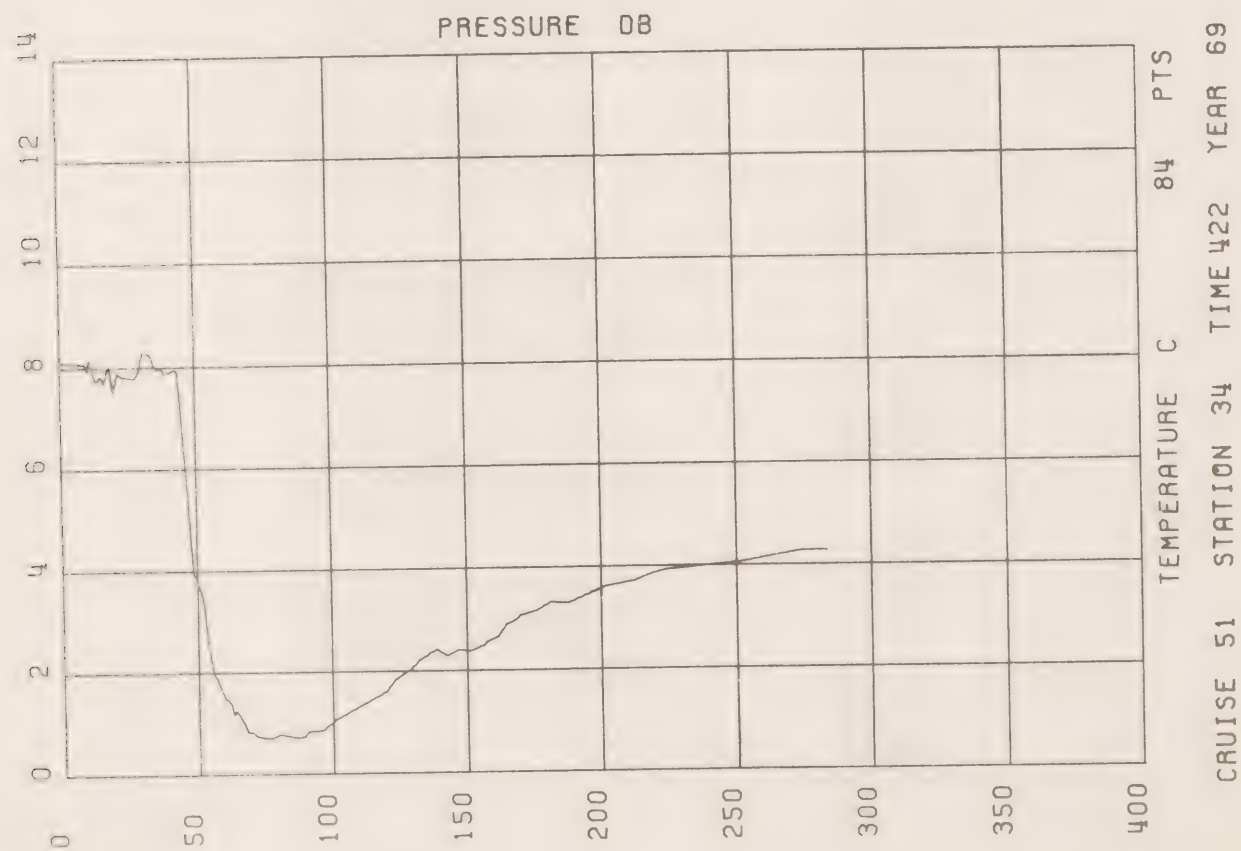
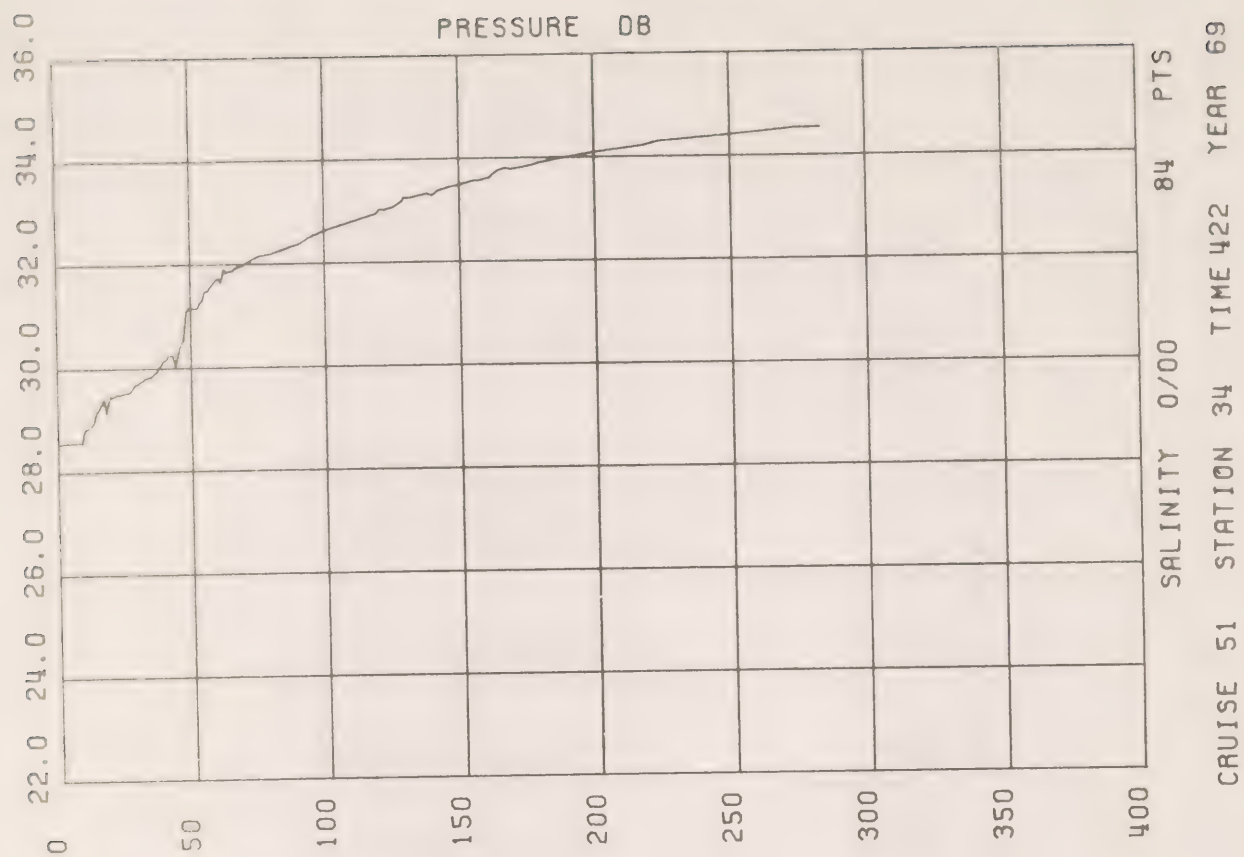
WAVE-P/H 0301
 SWEL-P/H 0502
 SWEL-D 100
 BARO 1005.7

WIND-DIR 170
 WIND-SPD 04
 AIR-TEM 11.5
 WET-BLB 10.3

COUN 18
 INST 10
 RESTR
 UNAS 05R

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	9.790W	9.789	29.256A	2253	2253	1482.4A	52	3	5320
	20.0	20.2A	8.769D	8.767	29.738C	2307	2307	1479.4A	103	11	4804
	30.0	30.2A	8.293B	8.290	30.084A	2340	2340	1478.1W	149	23	4493
	50.0	50.4A	3.251D	3.248	31.472C	2507	2507	1459.7A	225	53	2898
	75.0	75.5A	0.913B	0.910	32.075C	2572	2572	1450.6W	288	94	2276
	100.0	100.7A	0.987B	0.983	32.616A	2615	2615	1452.1A	340	140	1869
	125.0	125.9A	2.185A	2.178	33.236A	2656	2656	1458.7A	382	189	1480
	150.0	151.0A	2.843A	2.834	33.595A	2680	2680	1462.5A	418	236	1263
	175.0	176.2A	3.495E	3.483	33.962A	2703	2703	1466.2A	446	285	1049
	200.0	201.4A	3.603B	3.589	34.160B	2718	2718	1467.4A	471	333	911
	225.0	226.6A	4.029C	4.013	34.269B	2723	2723	1469.7A	495	384	874
	250.0	251.8	4.270	4.251	34.440	2733	2734	1471.3	515	434	774
	300.0	302.2W	4.371W	4.348	34.623W	2747	2747	1472.8W	552	538	654



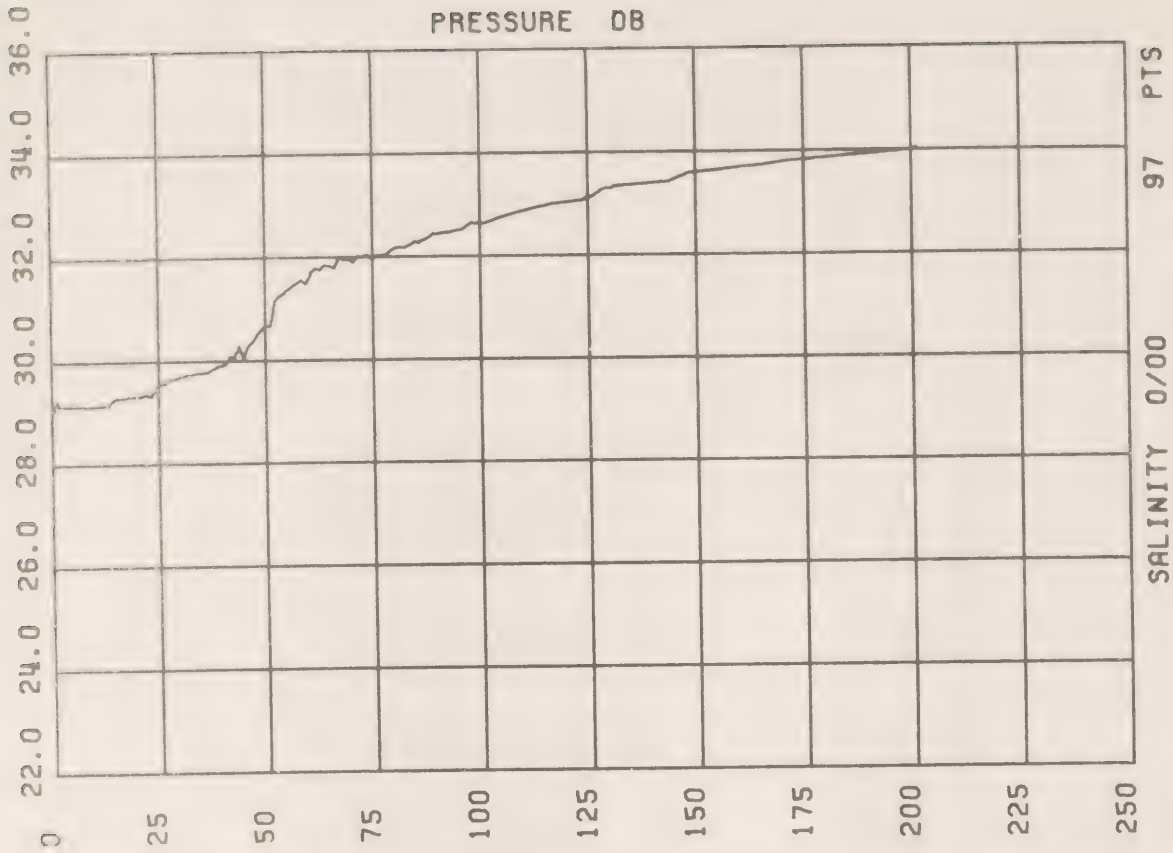
CRUISE NUMBER 69051 STATION NUMBER 034

LAT	N49	10.00	YEAR	1969	WAVE-P/H	0302	WIND-DIR	270	WW	02	COUN	18
LONG	W 64	30.00	MONTH	9	SWEL-P/H	0502	WIND-SPD	05	CLD-A		INST	10
DEPTH		290.0	DAY	24	SWEL-D	120	AIR-TEM	14.0			RESTR	
MARSD	SQ		H/M	0425	BARO	1005.0	WET-BLB	11.5			UNAS	05A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	0.0	0.0	8.110	8.110	28.554	2223	2223	1475.0	0	0	5607
	10.0	10.1A	7.969D	7.968	28.808C	2244	2244	1475.0W	56	3	5412
	20.0	20.2A	7.690C	7.688	29.470B	2301	2301	1474.8A	108	11	4867
	30.0	30.2A	8.256C	8.253	29.707A	2311	2311	1477.5A	157	24	4768
	50.0	50.4A	3.768C	3.765	31.158B	2478	2478	1461.5A	243	59	3175
	75.0	75.5A	0.700W	0.697	32.145A	2579	2579	1449.7W	308	99	2211
	100.0	100.7A	1.058A	1.054	32.646A	2617	2617	1452.4A	359	145	1849
	125.0	125.9A	1.923A	1.917	33.081A	2646	2646	1457.3A	403	195	1577
	150.0	151.0A	2.363A	2.355	33.499A	2676	2676	1460.2W	438	246	1296
	175.0	176.2A	3.153A	3.142	33.843A	2697	2697	1464.6A	469	295	1105
	200.0	201.4A	3.604A	3.590	34.107A	2714	2714	1467.2A	494	345	951
	225.0	226.6A	3.925A	3.909	34.304A	2726	2726	1469.3A	517	394	839
	250.0	251.8A	4.052A	4.034	34.413A	2734	2734	1470.4A	537	443	771

PRESSURE DB

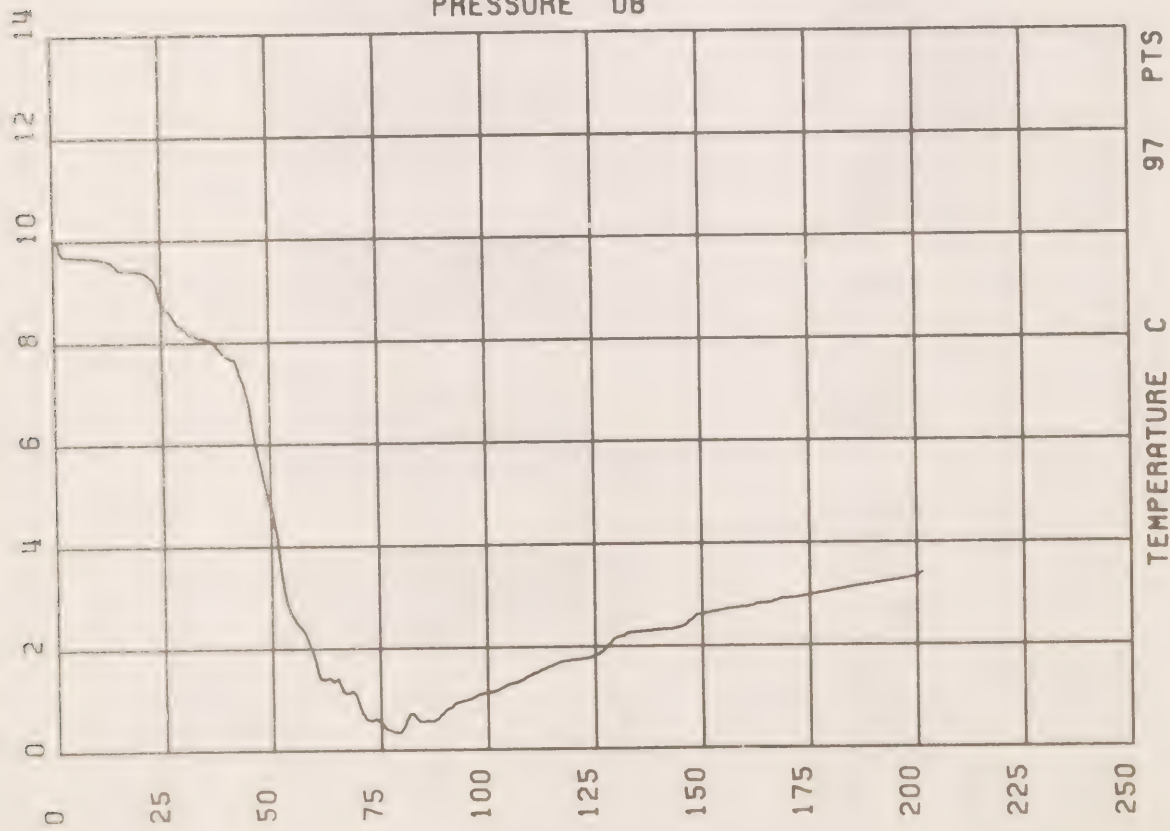


SALINITY 0/00

97 PTS

CRUISE 51 STATION 35 TIME 541 YEAR 69

PRESSURE DB



TEMPERATURE C

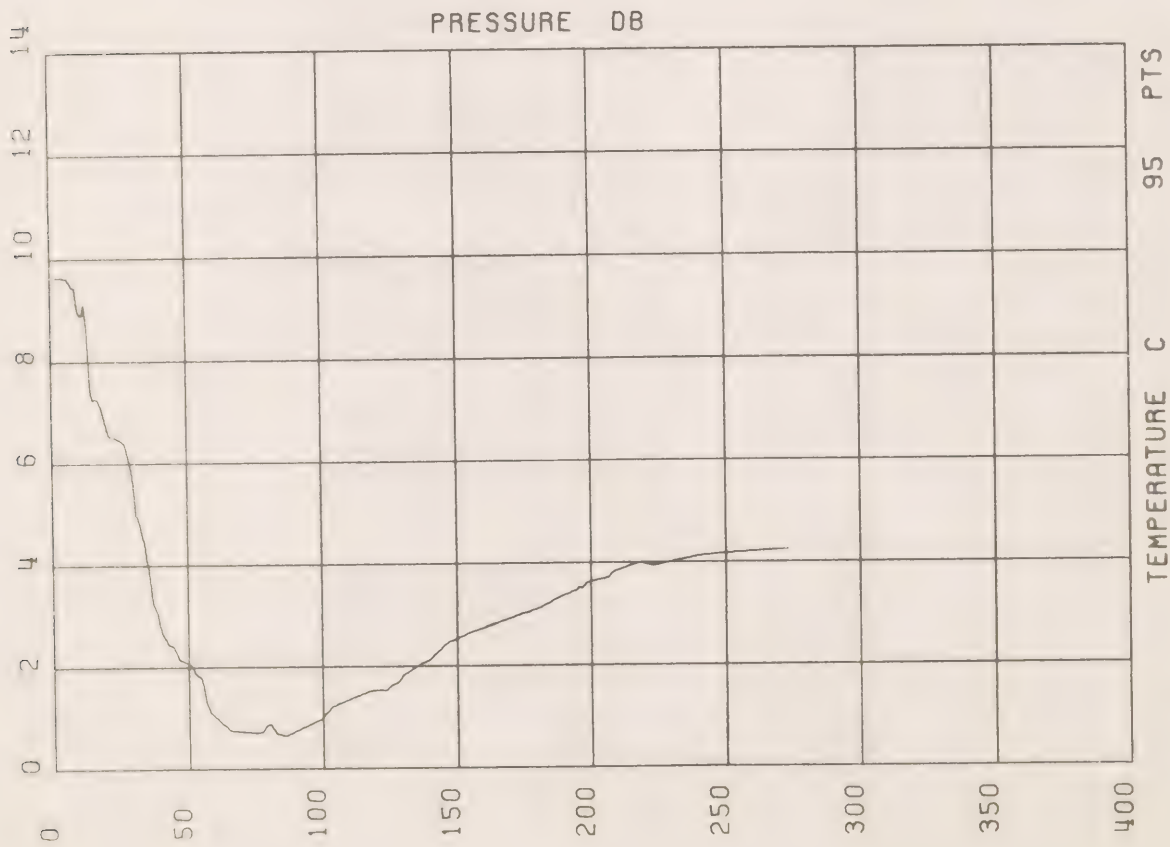
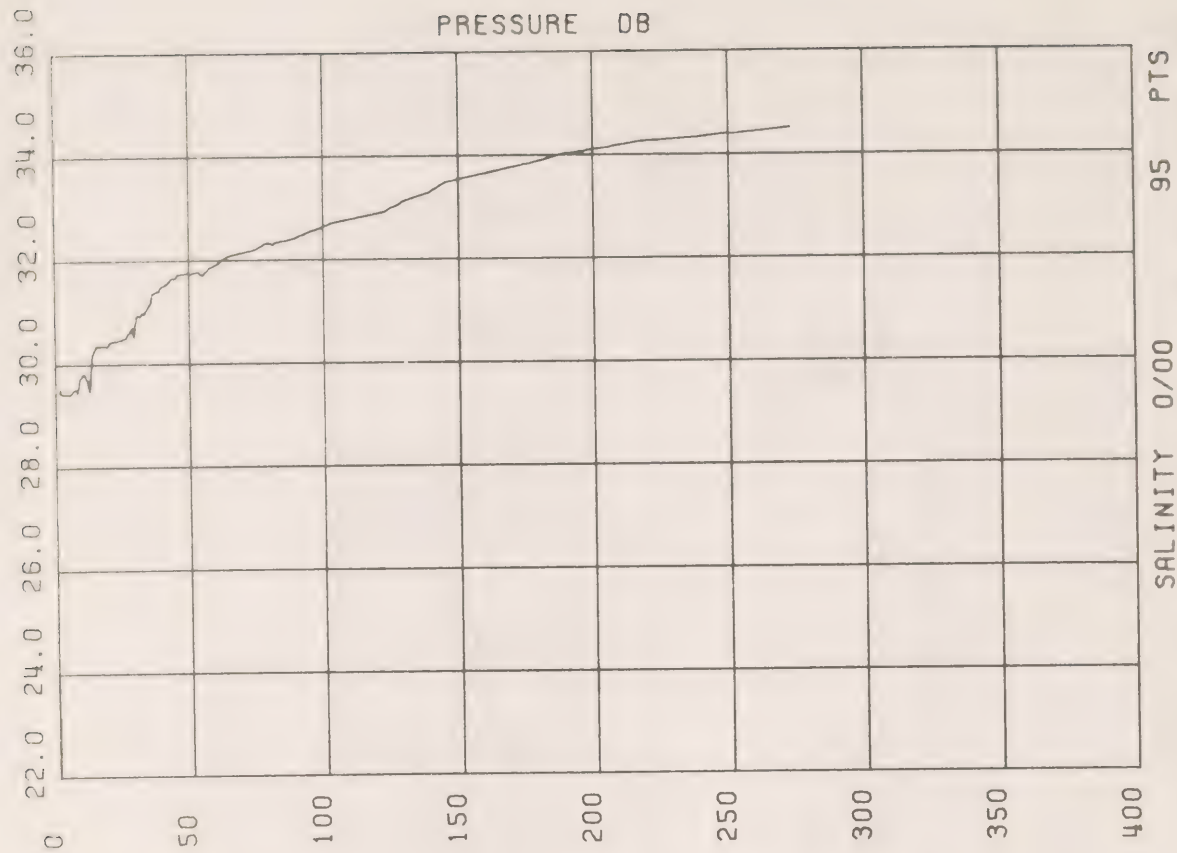
97 PTS

CRUISE 51 STATION 35 TIME 541 YEAR 69

LAT N49 0.00
 LONG W 64 15.00
 DEPTH 202.0
 MARSD SQ
 YEAR 1969
 MONTH 9
 DAY 24
 H/M 0542
 WAVE-P/H 0302
 SWEL-P/H 0502
 SWEL-D 120
 BARO 1004.0
 WIND-DIP 200
 WIND-SPD 17
 AIR-TEM 14.0
 WET-BLB 12.2
 STATION NUMBER 035
 WW 02
 CLD-A
 COUN 18
 INSTR 1C
 RESTR
 UNAS 06B

I N T E R P O L A T E D

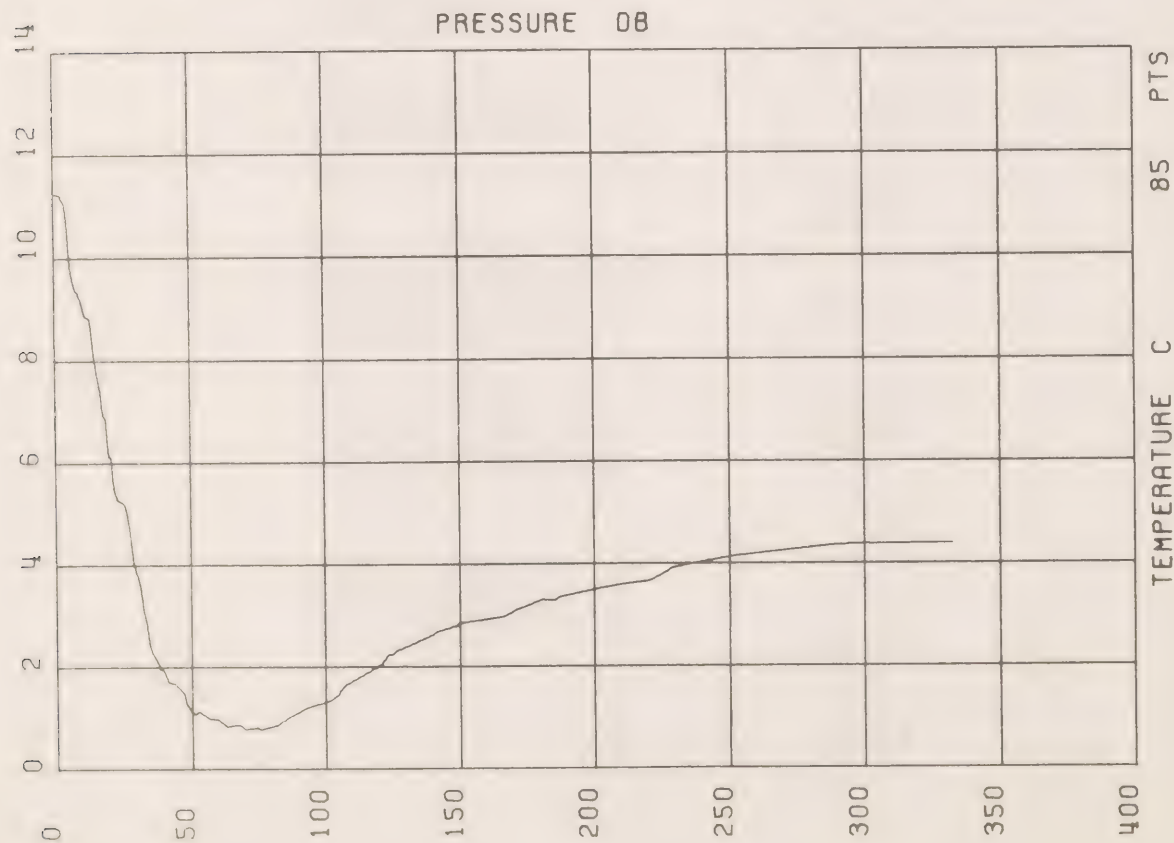
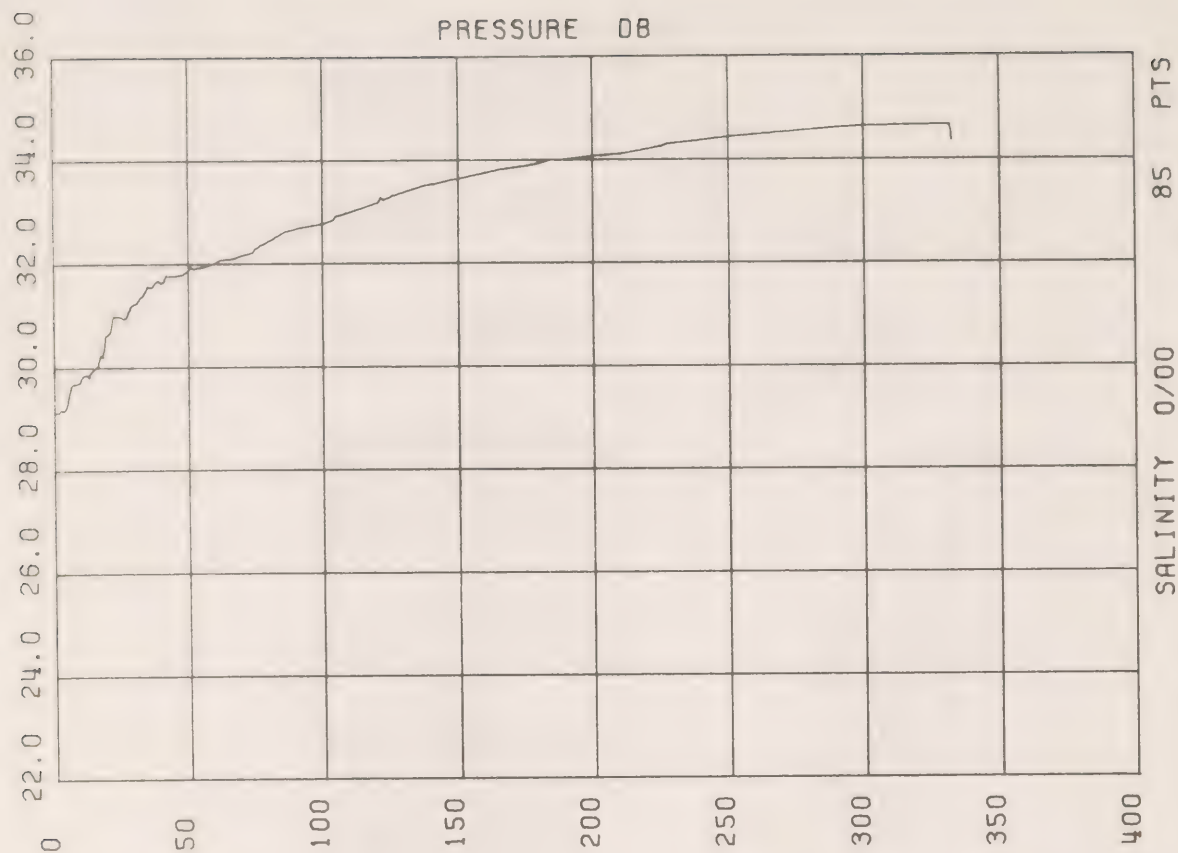
GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	9.653C	9.652	29.134B	2246	2246	1481.8W	51	2	5391
	20.0	20.2A	9.388A	9.386	29.320A	2265	2265	1481.2W	104	11	5215
	30.0	30.2A	8.247C	8.244	29.698B	2311	2311	1477.5A	155	24	4775
	50.0	50.4A	4.619A	4.615	30.683C	2433	2433	1464.4A	243	60	3615
	75.0	75.5A	0.510C	0.507	31.996A	2568	2568	1448.7A	310	102	2315
	100.0	100.7A	1.117A	1.113	32.638A	2616	2616	1452.7A	362	149	1860
	125.0	125.9A	1.836A	1.830	33.134A	2652	2652	1457.1A	404	197	1531
	150.0	151.0A	2.639A	2.630	33.604A	2682	2682	1461.7A	439	245	1239
	175.0	176.2A	2.995A	2.984	33.835A	2698	2698	1463.8A	467	295	1098
	200.0	201.4W	3.403W	3.390	34.040W	2711	2711	1466.4W	494	345	983



CRUISE NUMBER 69051 STATION NUMBER 036

LAT	N49	0.00	YEAR	1969	WAVE-P/H	0402	WIND-DIR	200	WW	02	COUN	18
LONG	W 64	0.00	MONTH	9	SWEL-P/H		WIND-SPD	17	CLD-A		INST	10
DEPTH		290.0	DAY	24	SWEL-D		AIR-TEM	13.2			RESTR	
MARSD	SQ		H/M	0634	BARO	1004.0	WET-BLB	10.8			UNAS	06C

I N T E R P O L A T E D												
GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA	
	10.0	10.1A	8.907A	8.906	29.784A	2308	2308	1479.8W	45	3	4798	
	20.0	20.2A	6.588A	6.586	30.388A	2387	2387	1471.7A	90	10	4047	
	30.0	30.2A	5.205E	5.203	30.765W	2436	2436	1466.6A	129	20	3578	
	50.0	50.4A	2.063A	2.061	31.735A	2538	2538	1454.9W	188	44	2606	
	75.0	75.5A	0.700W	0.697	32.214A	2585	2585	1449.8A	247	81	2157	
	100.0	100.7A	1.050A	1.046	32.653A	2618	2618	1452.5A	298	126	1844	
	125.0	125.9A	1.636B	1.630	33.016B	2643	2643	1456.0A	341	177	1607	
	150.0	151.0A	2.538A	2.529	33.552A	2679	2679	1461.1A	377	227	1271	
	175.0	176.2A	3.017W	3.006	33.835A	2697	2698	1463.9W	407	277	1099	
	200.0	201.4A	3.641A	3.627	34.113A	2714	2714	1467.4A	432	277	951	
	225.0	226.6A	3.974A	3.958	34.286A	2724	2724	1469.5A	455	376	856	
	250.0	251.8W	4.161W	4.143	34.390W	2730	2731	1470.8W	476	426	801	



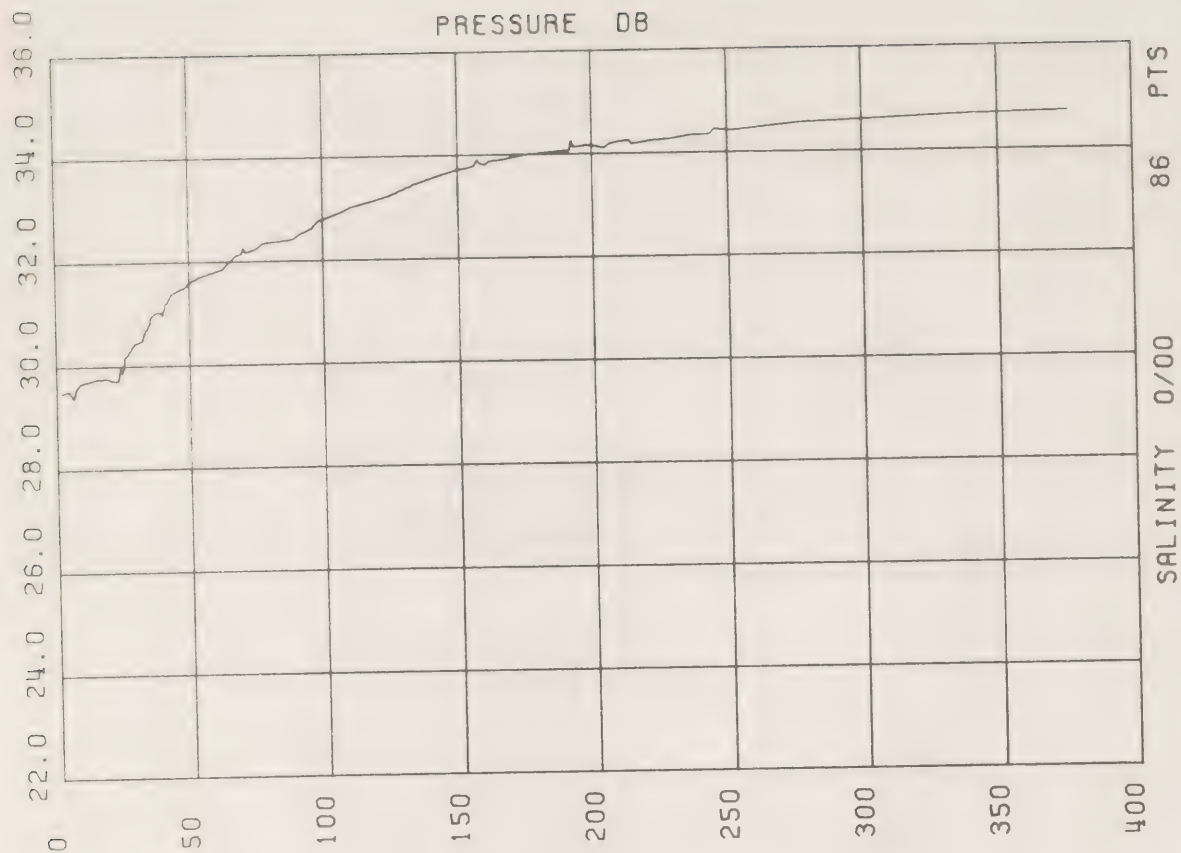
LAT N49 0.00 YEAR 1969 WAVE-P/H WIND-DIR COUN 18
 LONG W 63 45.00 MONTH 9 WIND-SPD WIND-CLD-A INST 10
 DEPTH 340.0 DAY 24 SWEL-D AIR-TEM RESTR 06D
 MARSQ SQ H/M 0730 BARO WET-BLB UNAS

CRUISE NUMBER 69051 STATION NUMBER 037

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEDA	CHI	SVA
	10.0	10.1A	9.074C	9.073	29.729B	2301	2301	1480.3W	51	3	4864
	20.0	20.2A	6.130W	6.128	30.632B	2411	2411	1470.3A	95	10	3815
	30.0	30.2A	3.711A	3.709	31.224A	2483	2483	1461.0A	130	18	3123
	50.0	50.4A	1.072B	1.070	31.883C	2556	2556	1450.7W	184	40	2432
	75.0	75.5A	0.762A	0.759	32.304A	2592	2592	1450.2A	242	77	2094
	100.0	100.7A	1.312A	1.308	32.773A	2626	2626	1453.8A	289	119	1769
	125.0	125.9A	2.296A	2.289	33.309A	2661	2661	1459.3A	329	165	1434
	150.0	151.0A	2.854B	2.845	33.644A	2684	2684	1462.6A	362	212	1228
	175.0	176.2A	3.192A	3.181	33.887A	2700	2700	1464.8A	391	260	1076
	200.0	201.4A	3.506A	3.493	34.072A	2712	2712	1466.8A	417	308	968
	225.0	226.6A	3.839A	3.823	34.272A	2725	2725	1468.9A	440	359	853
	250.0	251.8A	4.132A	4.114	34.448A	2735	2735	1470.8A	459	409	755
	300.0	302.2W	4.380W	4.357	34.640W	2748	2748	1472.9W	494	506	642

PRESSURE DB

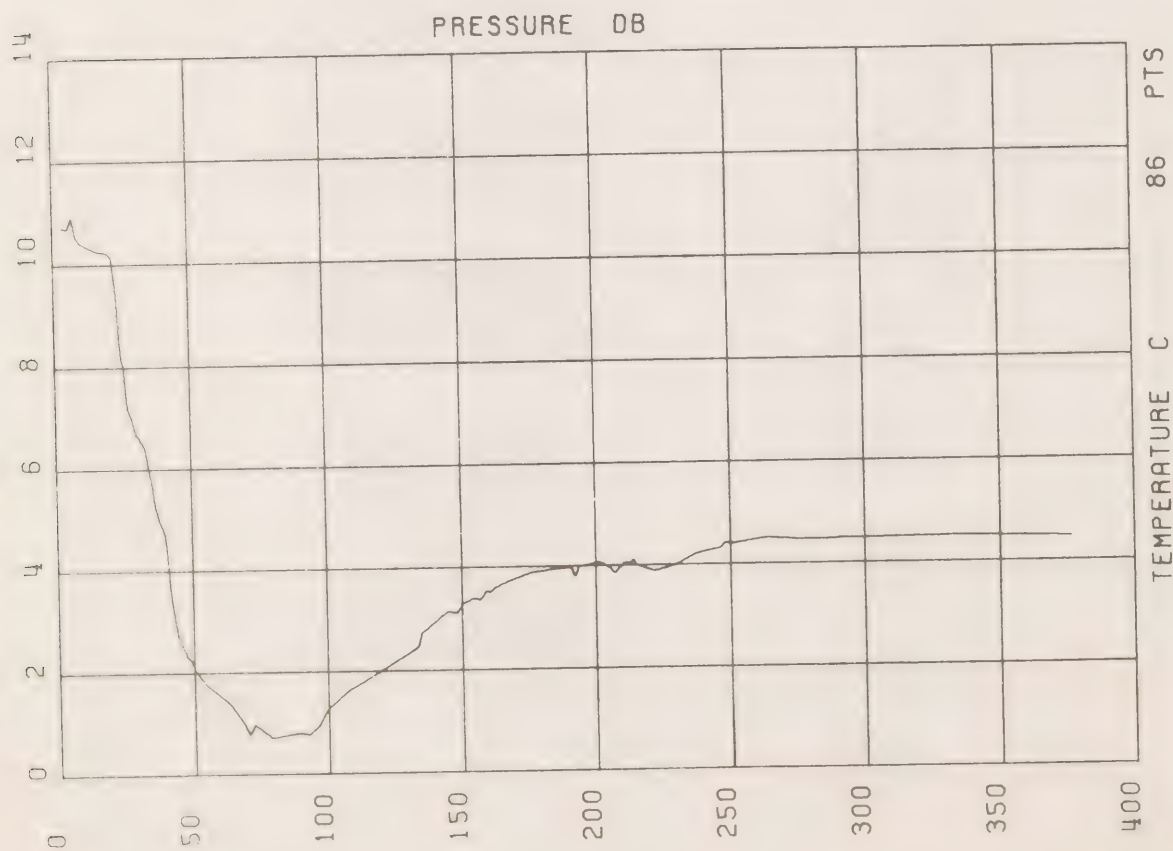


SALINITY 0/00

86 PTS

CRUISE 51 STATION 38 TIME 839 YEAR 69

PRESSURE DB



TEMPERATURE C

86 PTS

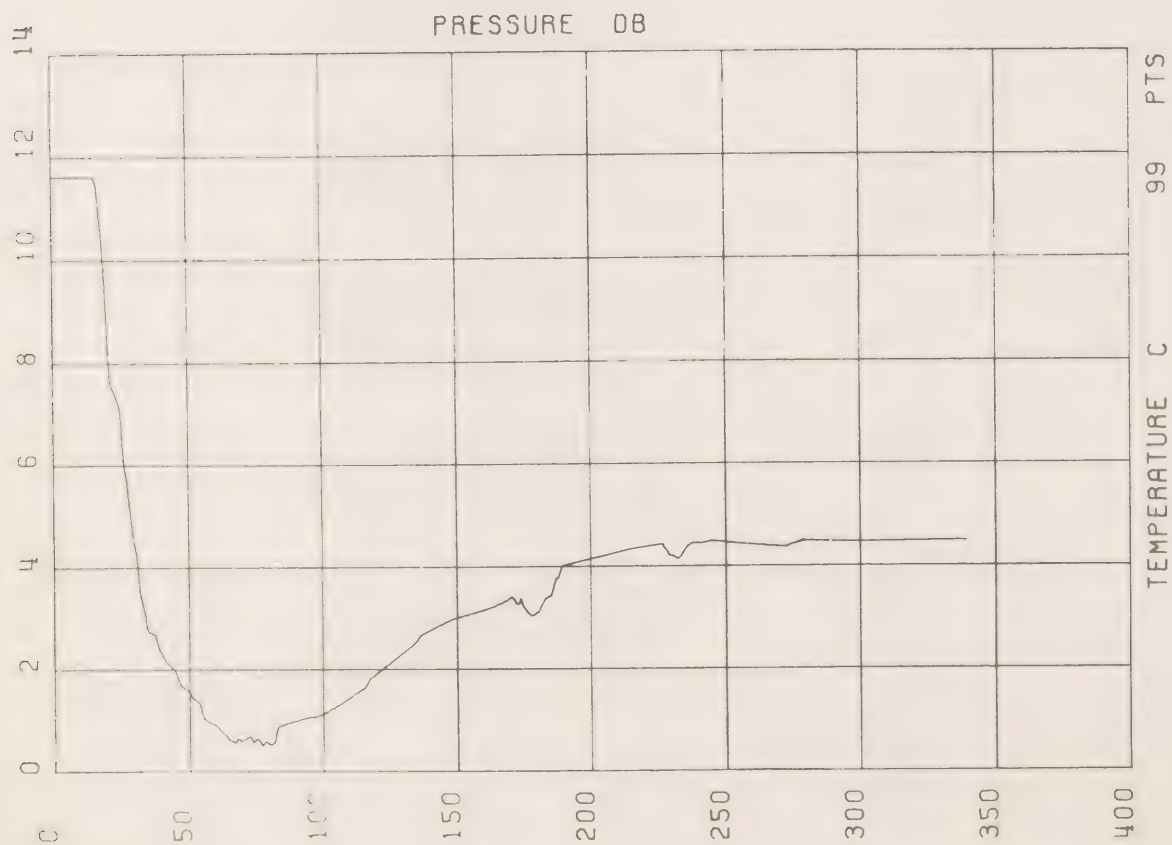
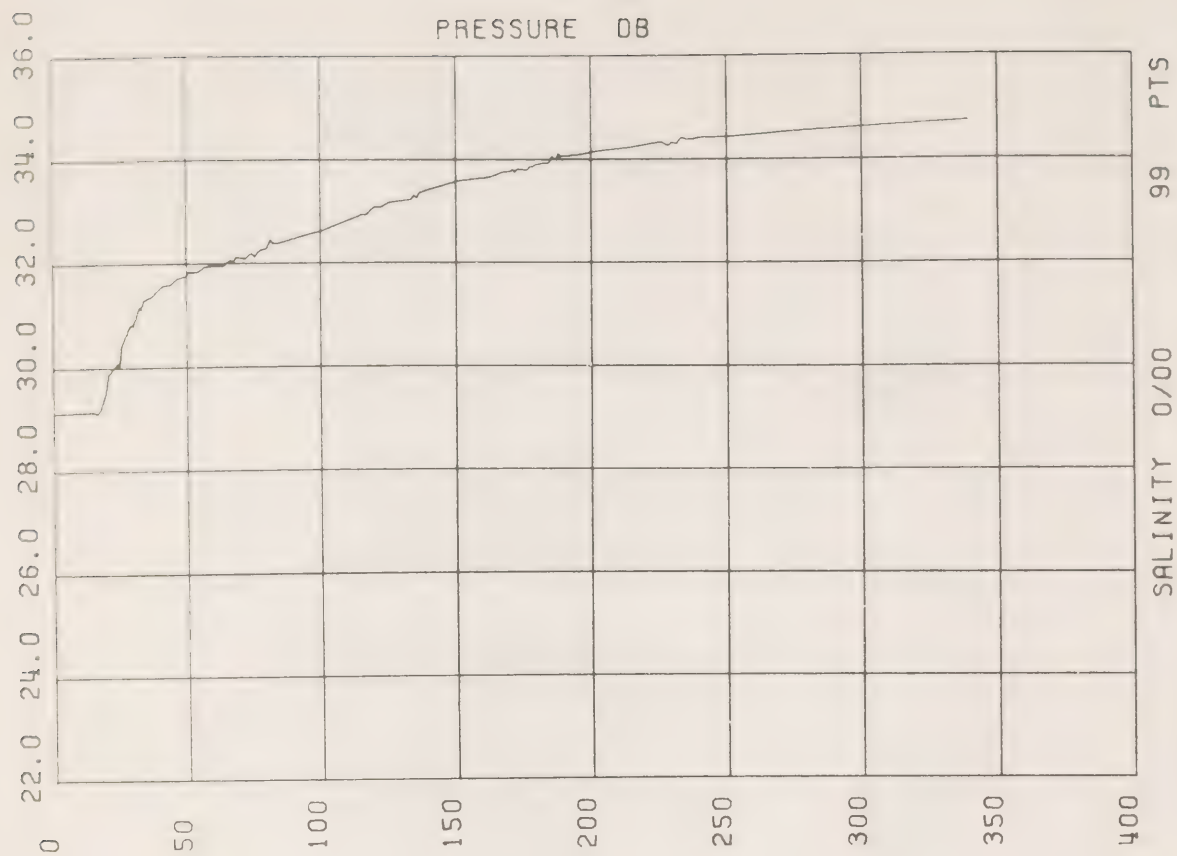
CRUISE 51 STATION 38 TIME 839 YEAR 69

LAT N49 0.00 YEAR 1969 WAVE-P/H WIND-OIR COUN 18
 LONG W 63 30.00 MONTH 9 WIND-SPD WIND-CLD-A INST 10
 DEPTH 380.0 DAY 24 AIR-TEM RESTR
 MARSD SQ H/M 0840 BAPO WET-BLB UNAS 06E

CRUISE NUMBER 69051 STATION NUMBER 038

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	10.380C	10.379	29.700C	2278	2278	1485.2A	44	3	5083
	20.0	20.2A	10.200C	10.198	29.740B	2285	2285	1484.7A	95	10	5023
	30.0	30.2A	6.629C	6.626	30.439B	2391	2391	1472.1A	140	22	4015
	50.0	50.4A	1.998A	1.996	31.602A	2528	2528	1454.4A	205	49	2704
	75.0	75.5	0.810	0.807	32.244	2587	2587	1450.4	267	87	2141
	100.0	100.7A	1.341R	1.337	32.814C	2630	2630	1454.0A	316	132	1737
	125.0	125.9A	2.200A	2.193	33.256A	2658	2658	1458.3A	356	178	1466
	150.0	151.0A	3.298A	3.288	33.723A	2686	2686	1464.6A	389	225	1244
	175.0	176.2A	3.878A	3.866	34.002A	2702	2702	1467.3A	418	272	1064
	200.0	201.4A	4.066A	4.052	34.144A	2712	2713	1469.3A	443	320	970
	225.0	226.6A	3.935A	3.919	34.261A	2723	2723	1469.3A	466	371	870
	250.0	251.8A	4.391A	4.372	34.420A	2731	2731	1471.8A	487	422	803
	300.0	302.2A	4.480A	4.457	34.608A	2744	2745	1473.3A	523	525	676



CRUISE NUMBER 69051 STATION NUMBER 039

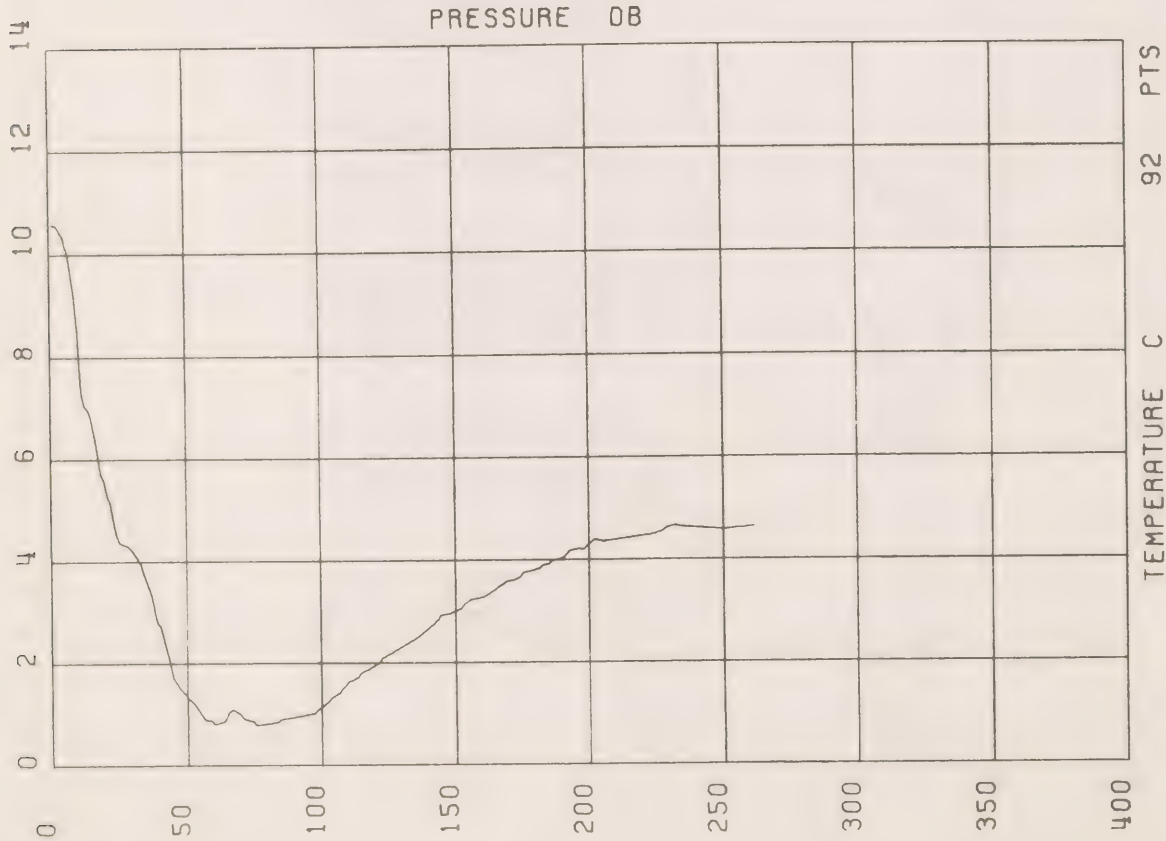
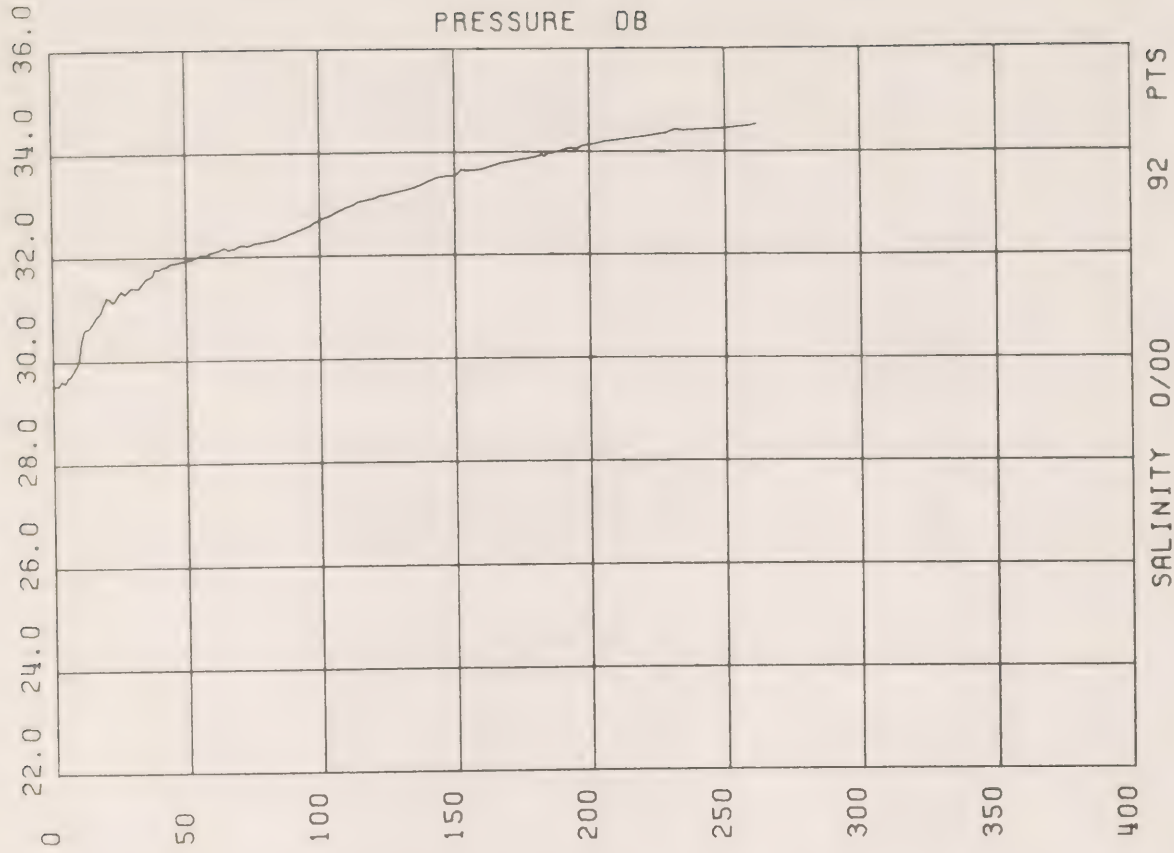
LAT	N49	0.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 63	15.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		404.0	DAY	24	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	0932	BARO	WET-BLB	UNAS	06F

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.620W	11.619	29.145A	2214	2214	1488.9A	55	3	5694
	20.0	20.2A	8.335D	8.333	29.638D	2304	2304	1477.5A	112	11	4841
	30.0	30.2A	4.277A	4.275	30.805A	2445	2445	1462.8A	153	22	3489
	50.0	50.4A	1.500B	1.498	31.787B	2546	2546	1452.5A	210	45	2530
	75.0	75.5A	0.625A	0.622	32.111A	2577	2577	1449.3A	269	83	2233
	100.0	100.7A	1.143A	1.139	32.621A	2615	2615	1452.8A	320	128	1873
	125.0	125.9A	2.168A	2.161	33.181B	2653	2653	1458.6A	363	177	1522
	150.0	151.0A	3.006A	2.997	33.594B	2678	2678	1463.1A	398	227	1273
	175.0	176.2A	3.087A	3.076	33.782A	2693	2693	1464.2A	429	278	1146
	200.0	201.4A	4.163A	4.148	34.149A	2712	2712	1469.7A	455	328	976
	225.0	226.6A	4.384C	4.367	34.313C	2722	2722	1471.2A	478	379	878
	250.0	251.8A	4.441W	4.422	34.437A	2731	2732	1472.1W	499	430	795
	300.0	302.2A	4.460W	4.437	34.615A	2745	2745	1473.2A	535	533	669
	400.0	403.0W	4.480W	4.449	34.740W	2755	2755	1475.1W	596	752	589

111



PRESSURE DB

SALINITY 0/00

TEMPERATURE C

CRUISE 51 STATION 40 TIME 1302 YEAR 69

CRUISE 51 STATION 40 TIME 1302 YEAR 69

92 PTS

92 PTS

LAT N49 0.00 YEAR 1969 WAVE-P/H WIND-DIR 210 W 03
 LONG W 63 0.00 MONTH 9 SWEL-P/H WIND-SPD 16 CLD-A 6
 DEPTH 352.0 DAY 24 SWEL-D AIR-TEM 14.5
 MARSQ SQ H/M 1118 BARO 1003.9 WET-BLB 12.4

CRUISE NUMBER 69051

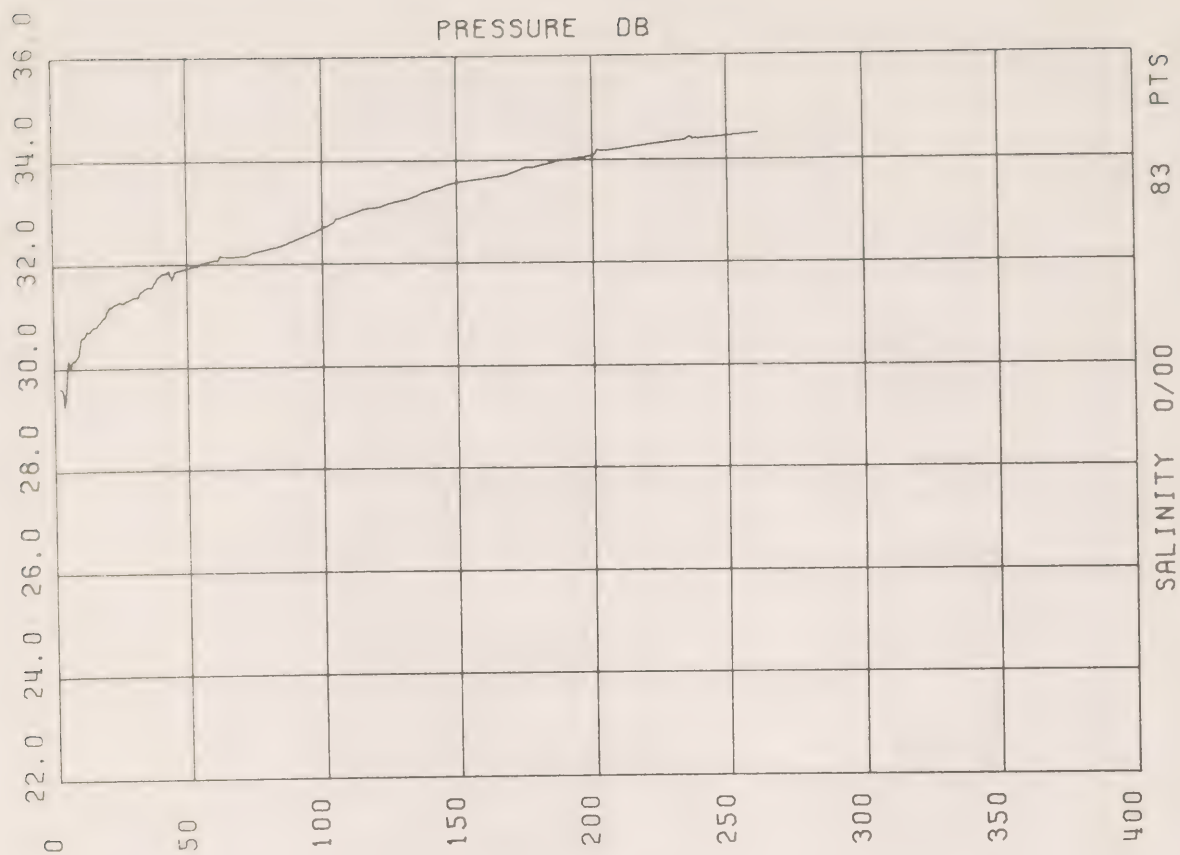
STATION NUMBER 040

COUN 18
 INST 10
 RESTR
 UNAS 06G

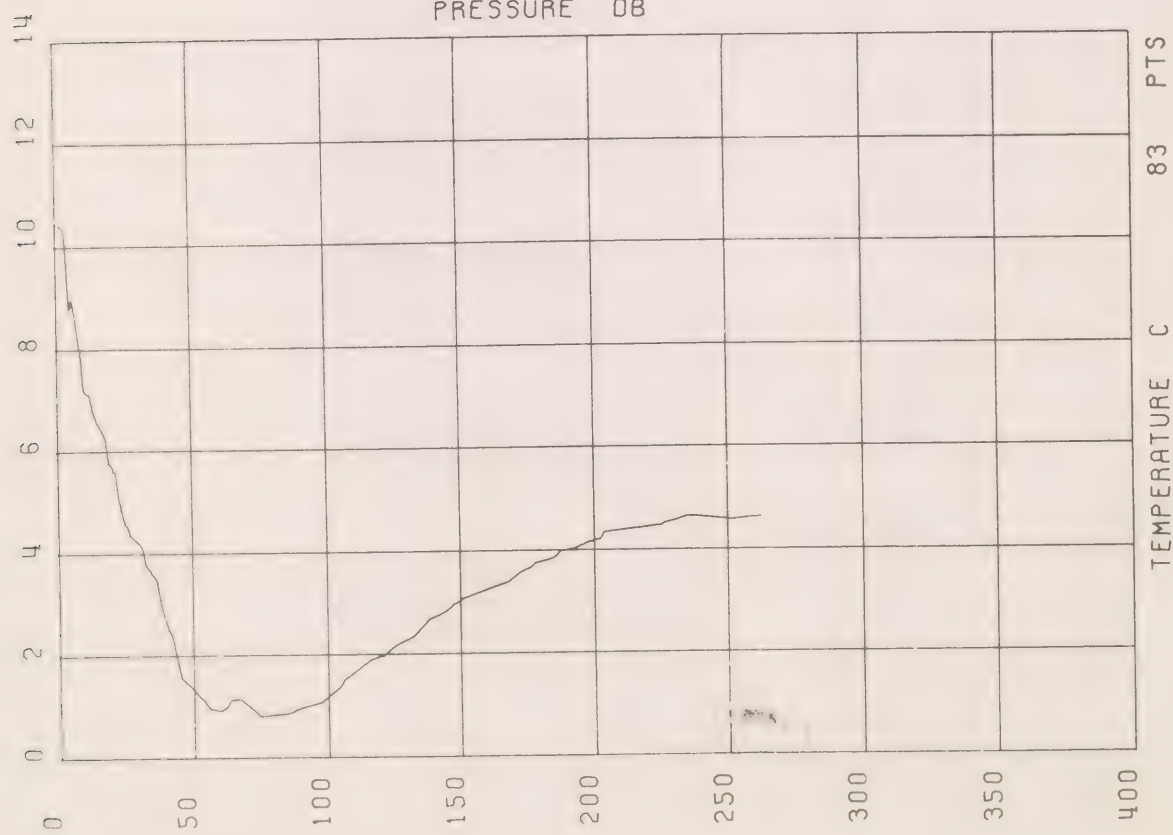
I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.382D	8.381	30.083D	2339	2339	1478.1A	46	2	4505
	20.0	20.2A	5.327C	5.325	31.225A	2466	2466	1467.6A	84	9	3289
	30.0	30.2A	4.156B	4.154	31.422B	2495	2495	1463.2A	116	16	3012
	50.0	50.4A	1.274A	1.272	31.933A	2559	2559	1451.6A	170	38	2406
	75.0	75.5A	0.770B	0.767	32.251A	2587	2587	1450.2W	227	74	2135
	100.0	100.7	1.160	1.156	32.716	2622	2622	1453.0	277	120	1803
	125.0	125.9A	2.188A	2.181	33.190A	2653	2653	1458.7A	318	167	1514
	150.0	151.1A	3.015A	3.006	33.561A	2676	2676	1463.2A	354	217	1304
	175.0	176.2A	3.741A	3.729	33.853W	2692	2692	1467.1A	384	268	1155
	200.0	201.4A	4.378C	4.363	34.136A	2708	2709	1470.5A	411	320	1010
	225.0	226.6A	4.517A	4.500	34.349A	2724	2724	1471.9A	435	371	867
	250.0	251.8A	4.570W	4.551	34.459A	2732	2732	1472.6W	456	422	793

PRESSURE DB

SALINITY 0/00 83 PTS
CRUISE 51 STATION 41 TIME 1346 YEAR 69

PRESSURE DB

TEMPERATURE C 83 PTS
CRUISE 51 STATION 41 TIME 1346 YEAR 69

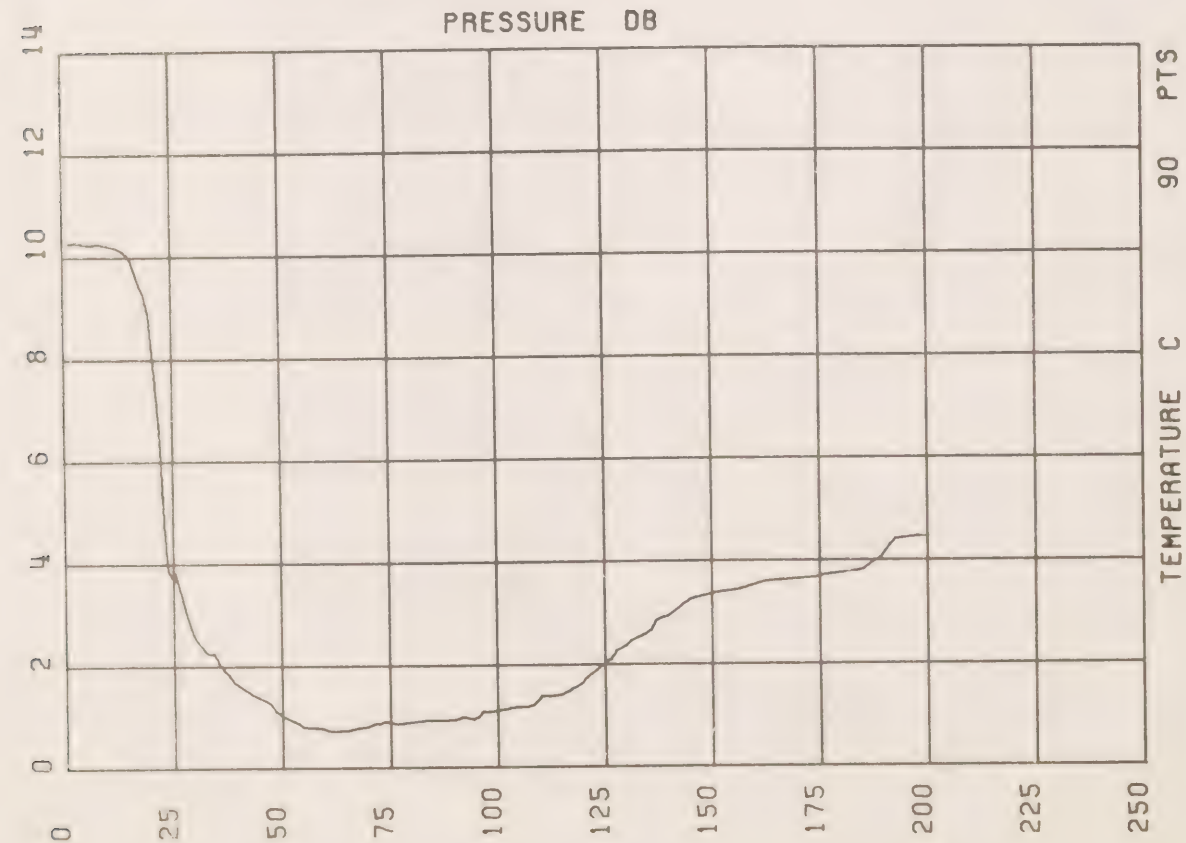
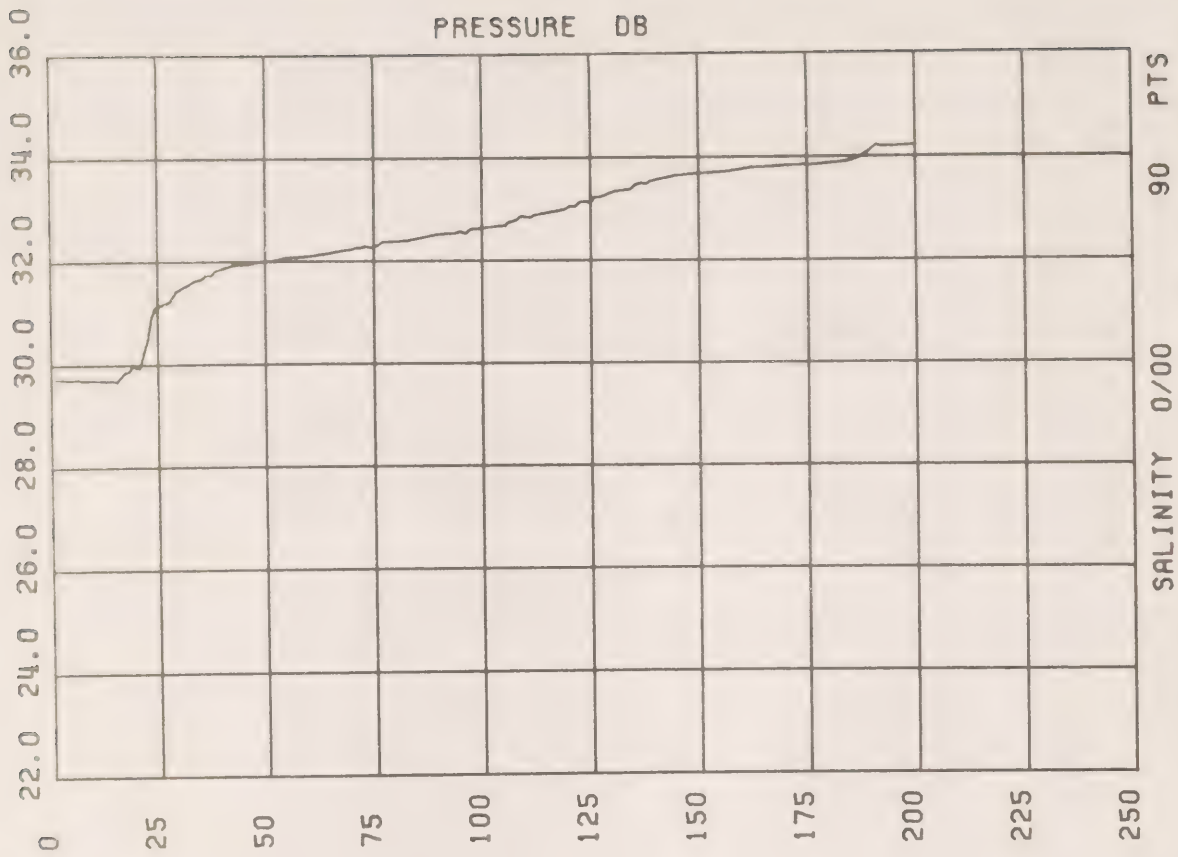
CRUISE NUMBER 69051 STATION NUMBER 041

LAT N49 0.00 YEAR 1969 WAVE-P/H WIND-DIR 220 WW 02
 LONG W 62 45.00 MONTH 9 SWEL-P/H WIND-SPD 16 CLD-A 7
 DEPTH 268.0 DAY 24 SWEL-D AIR-TEM
 MARSD SQ H/M 1300 BARO 1004.4 WET-BLB

COUN 18
 INST 10
 UNAS 06H

I N T E R P O L A T E D

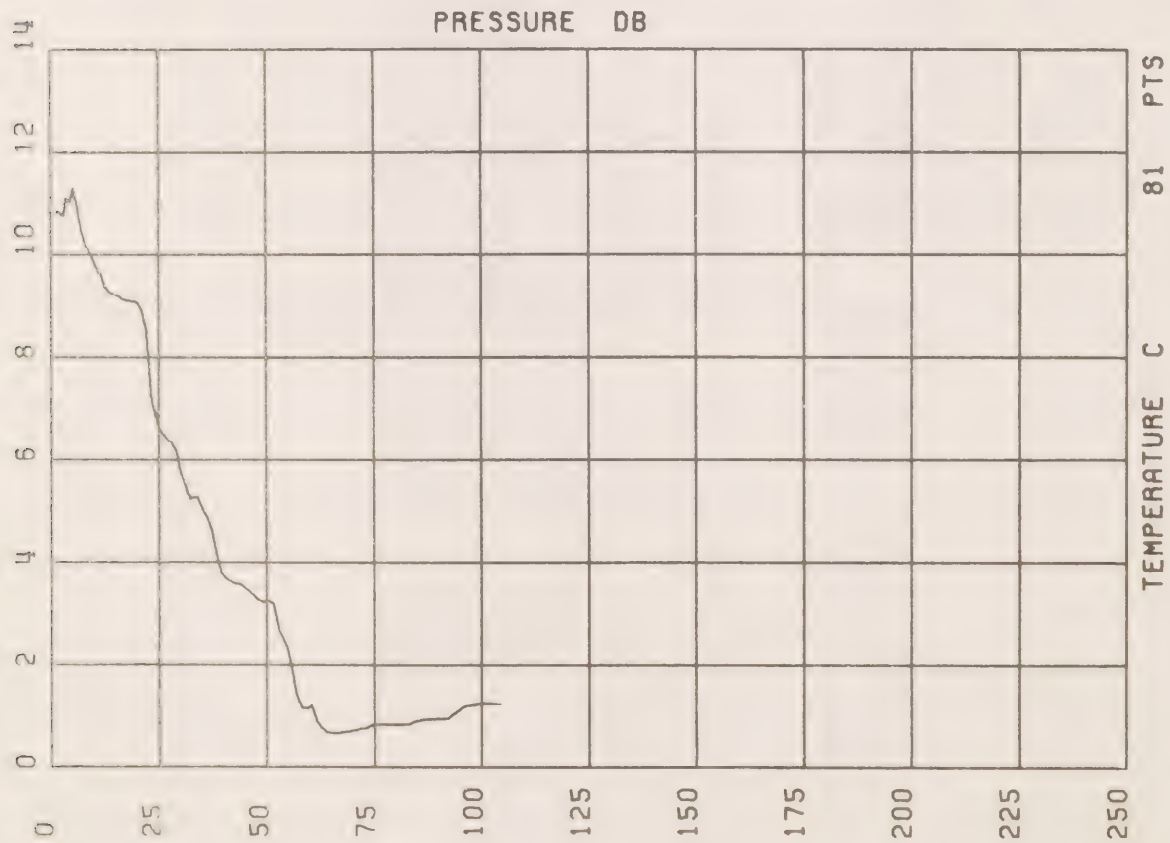
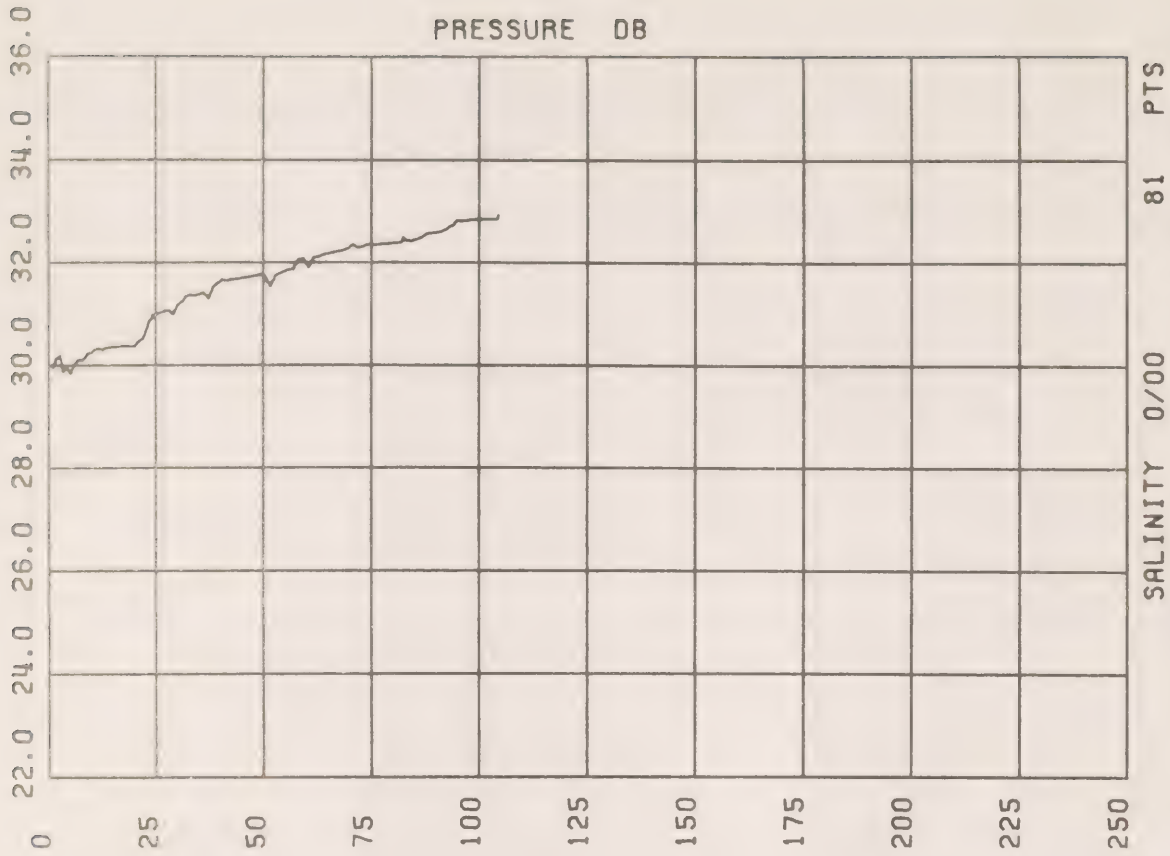
GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1	7.200	7.199	30.601	2396	2396	1474.2	38	2	3960
	20.0	20.2A	5.725C	5.723	31.143A	2456	2456	1469.2A	76	8	3383
	30.0	30.2A	4.208A	4.206	31.375A	2491	2491	1463.4A	108	17	3054
	50.0	50.4A	1.317A	1.315	31.925A	2558	2558	1451.8A	161	38	2414
	75.0	75.5A	0.772C	0.769	32.236B	2586	2586	1450.2A	219	74	2146
	100.0	100.7A	1.169A	1.164	32.707A	2621	2621	1453.1A	268	119	1810
	125.0	125.9A	2.171B	2.164	33.180A	2653	2653	1458.6A	310	167	1521
	150.0	151.0	3.060	3.051	33.574	2676	2677	1463.4	345	217	1298
	175.0	176.2A	3.658A	3.646	33.853A	2693	2693	1466.7A	376	269	1145
	200.0	201.4A	4.183A	4.169	34.117C	2709	2709	1469.8A	404	322	1002
	225.0	226.6A	4.509B	4.492	34.326A	2722	2722	1471.8A	428	373	883
	250.0	251.8W	4.571W	4.552	34.451W	2731	2731	1472.6W	449	425	799



CRUISE NUMBER 69051 STATION NUMBER 042
 LAT N49 0.00 YEAR 1969 WAVE-P/H WIND-DIR 250 COUN 18
 LONG W 62 30.00 MONTH 9 SWEL-P/H WIND-SPD C4 INST 10
 DEPTH 208.0 DAY 24 SWEL-D AIR-TEM 14.0 RESTR
 MARSD SQ H/M 1448 BARO 1003.9 WET-BLB 12.0 UNAS 061

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	10.221A	10.220	29.690W	2281	2281	1484.6A	45	2	50.97
	20.0	20.2A	8.171D	8.169	29.967D	2332	2332	1477.2A	95	11	45.73
	30.0	30.2	2.510	2.508	31.464	2513	2513	1456.2	130	19	25.43
	50.0	50.4A	0.986B	0.984	32.006A	2566	2566	1450.4A	181	30	23.33
	75.0	75.5A	0.873W	0.870	32.292A	2590	2590	1450.7W	236	75	21.09
	100.0	100.7A	1.123W	1.118	32.646A	2617	2617	1452.8W	286	120	15.54
	125.0	125.9A	2.071B	2.064	33.234P	2658	2658	1458.2A	328	169	14.73
	150.0	151.0A	3.381A	3.371	33.698A	2683	2683	1465.0A	361	215	12.74
	175.0	176.2A	3.705A	3.693	33.842A	2692	2692	1466.9A	392	265	11.58



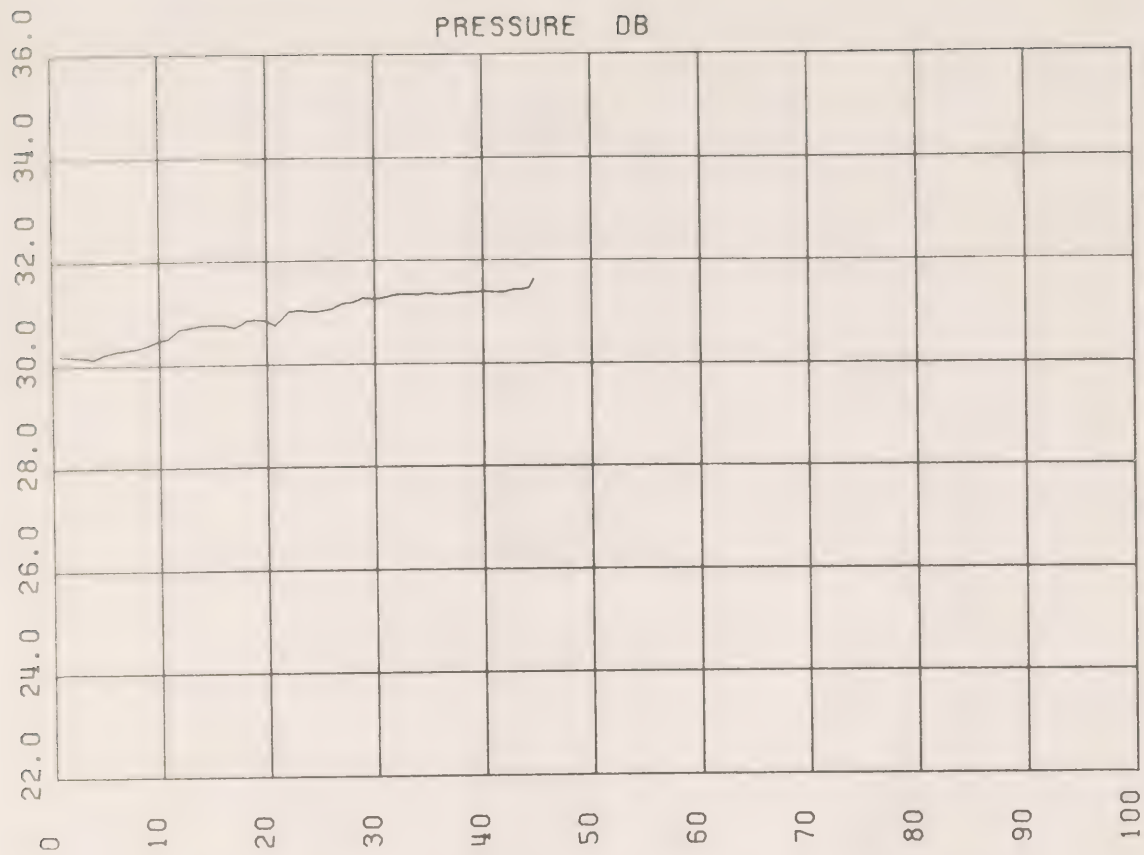
LAT	N49	0.00	YEAR	1969	WAVE-P/H	WIND-DIR	250	WW	02	COUN	18
LONG	W 62	15.00	MONTH	9	SWEL-P/H	WIND-SPD	04	CLD-A	6	INST	10
DEPTH		106.0	DAY	24	SWEL-D	AIR-TEM	14.4			RESTR	
MAPSD	SQ		H/M	1546	BARO	1004.0	WET-BLB	11.6		UNAS	06J

CRUISE NUMBER 69051 STATION NUMBER 043

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	9.807B	9.806	30.251A	2331	2331	1483.8A	45	2	4584
	20.0	20.2A	9.044A	9.042	30.380C	2353	2353	1481.2A	90	9	4374
	30.0	30.2A	5.675D	5.673	31.183C	2461	2461	1469.2A	127	19	3348
	50.0	50.4A	3.249A	3.246	31.730W	2529	2529	1460.1A	186	43	2696
	75.0	75.5A	0.830W	0.827	32.337A	2594	2594	1450.6A	244	80	2072
	100.0	100.7W	1.250W	1.246	32.840W	2632	2632	1453.6W	292	122	1715

PRESSURE DB

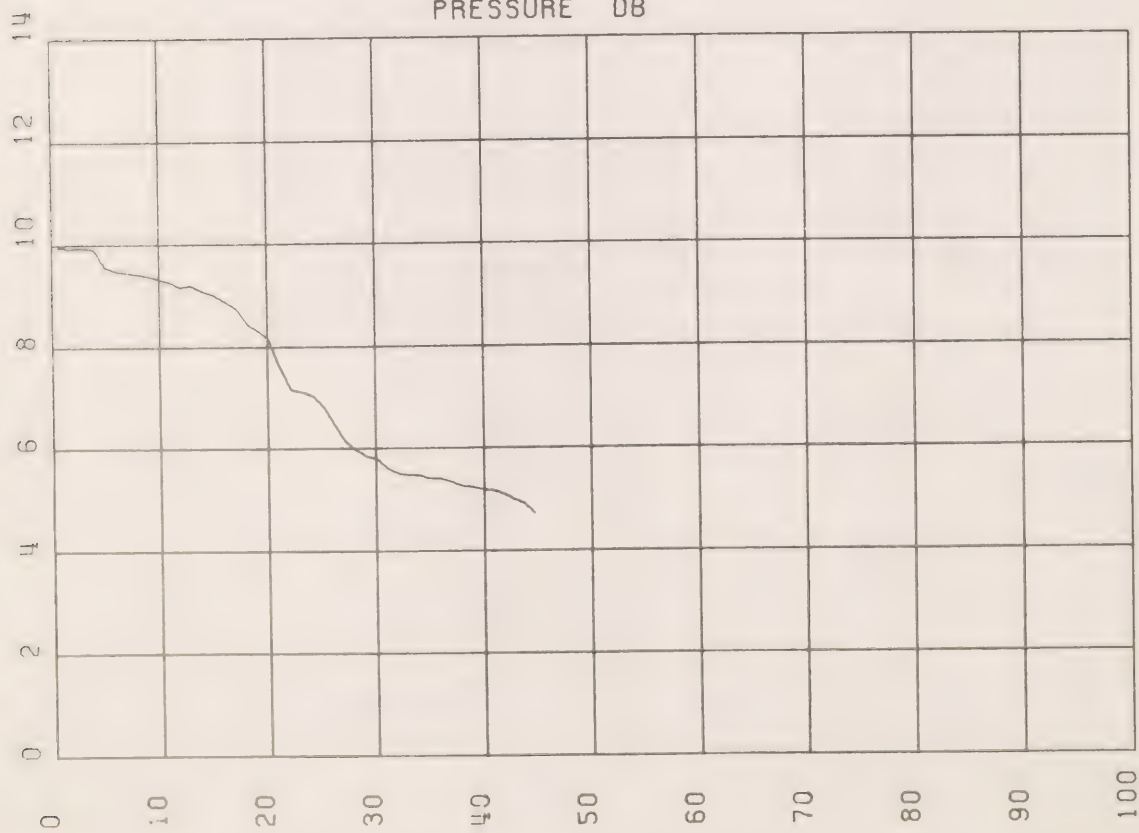


SALINITY 0/00

50 PTS

CRUISE 51 STATION 44 TIME 1639 YEAR 69

PRESSURE DB



TEMPERATURE C

50 PTS

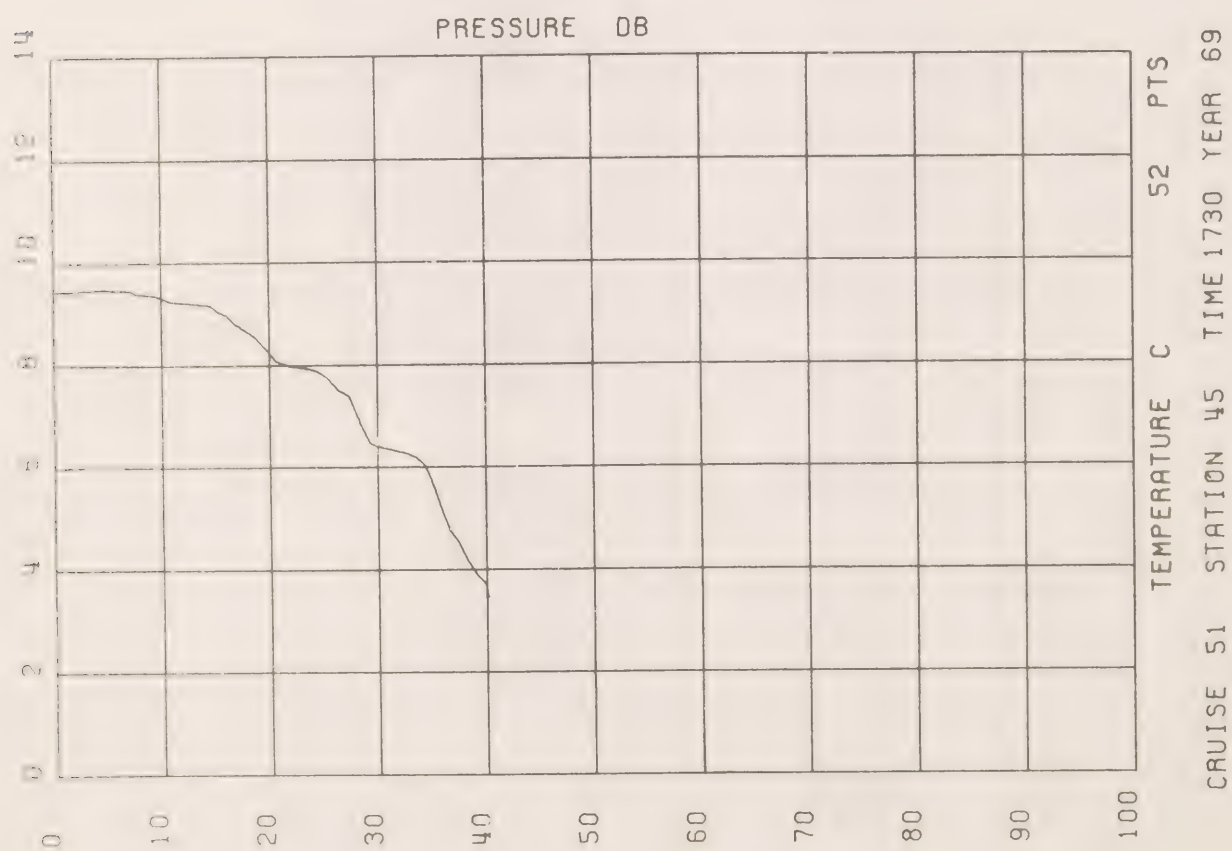
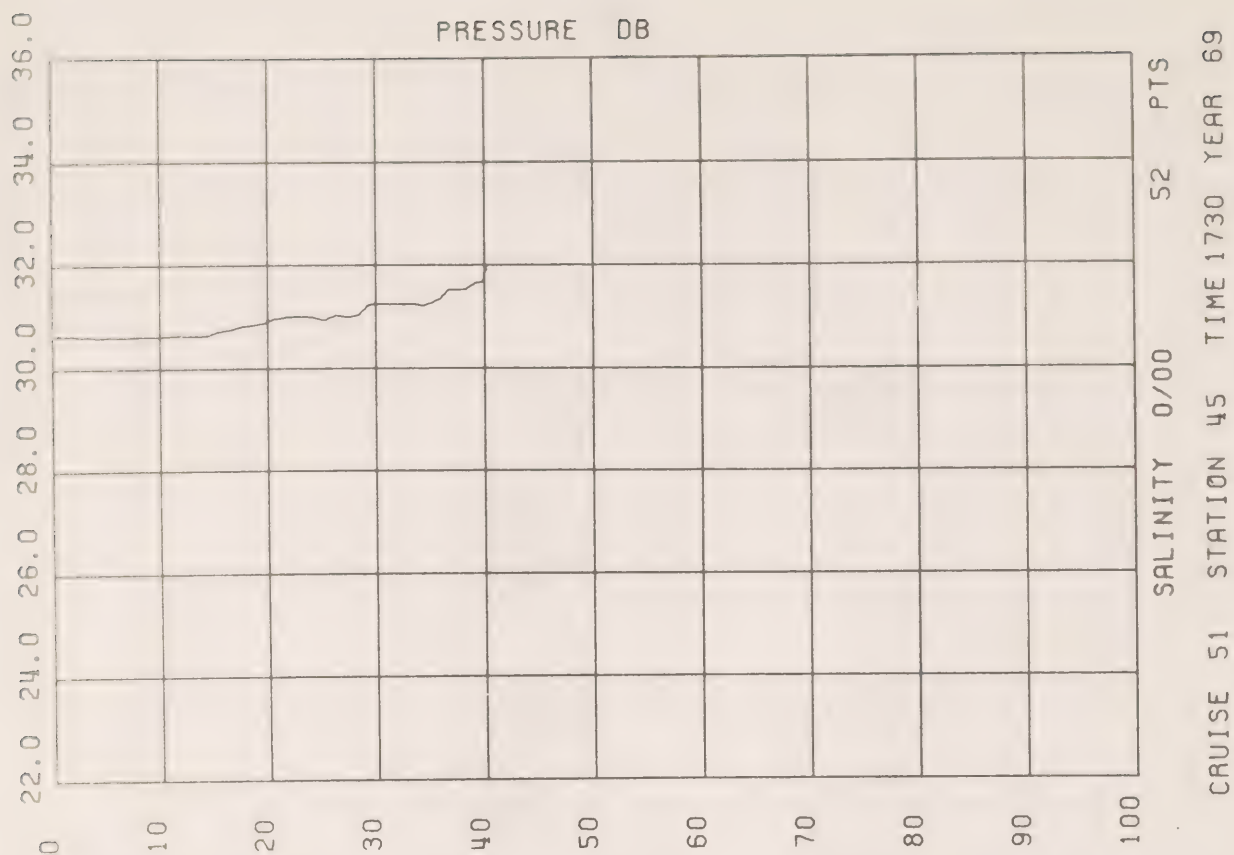
CRUISE 51 STATION 44 TIME 1639 YEAR 69

CRUISE NUMBER 69051 STATION NUMBER 044

LAT	N49	0.00	YEAR	1969	WAVE-P/H	WIND-DIR	240	WW	02	COUN	18
LONG	W 62	0.00	MONTH	9	SWEL-P/H	WIND-SPD	05	CLD-A	6	INST	10
DEPTH		44.0	DAY	24	SWEL-D	AIR-TEM	14.0			RESTR	
MARSD	SQ		H/M	1638	BARO	1004.0	WET-BLB	11.6		UNAS	06K

I N T E R P O L A T E D

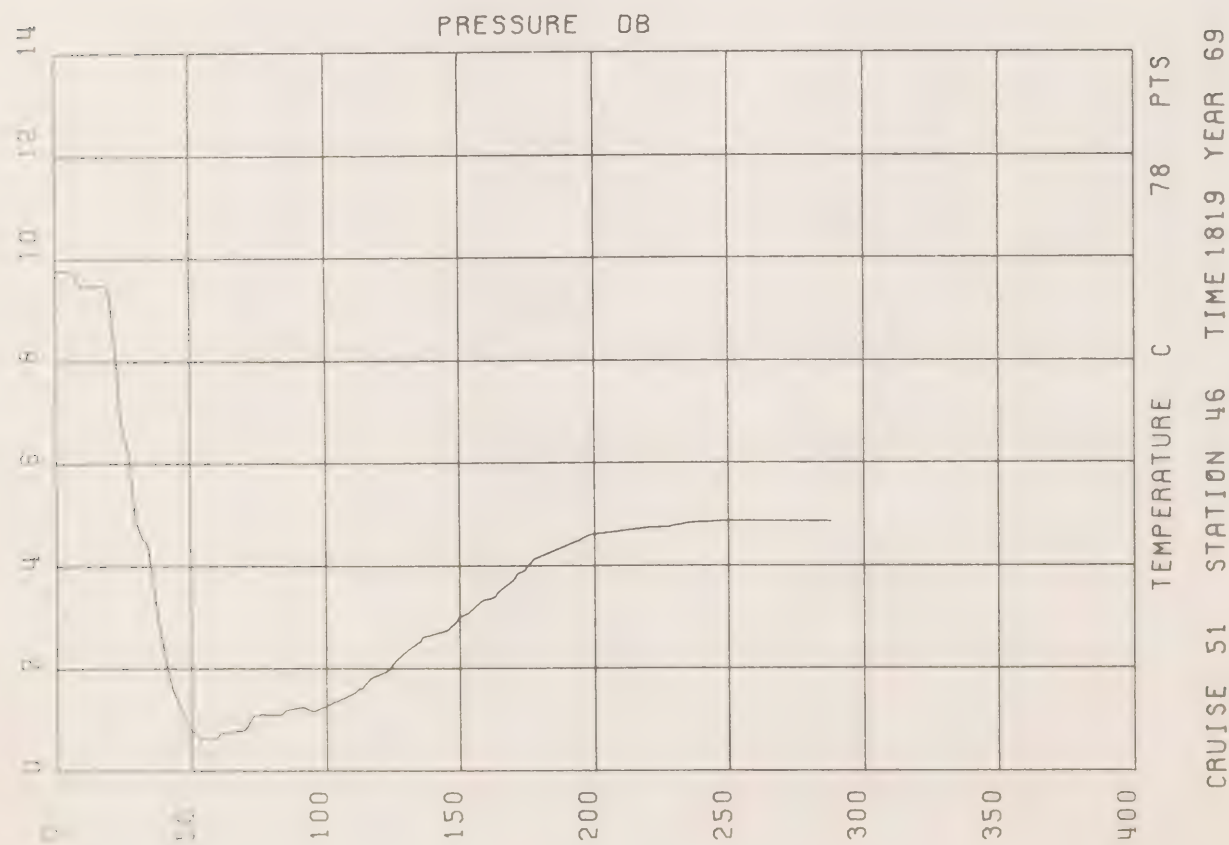
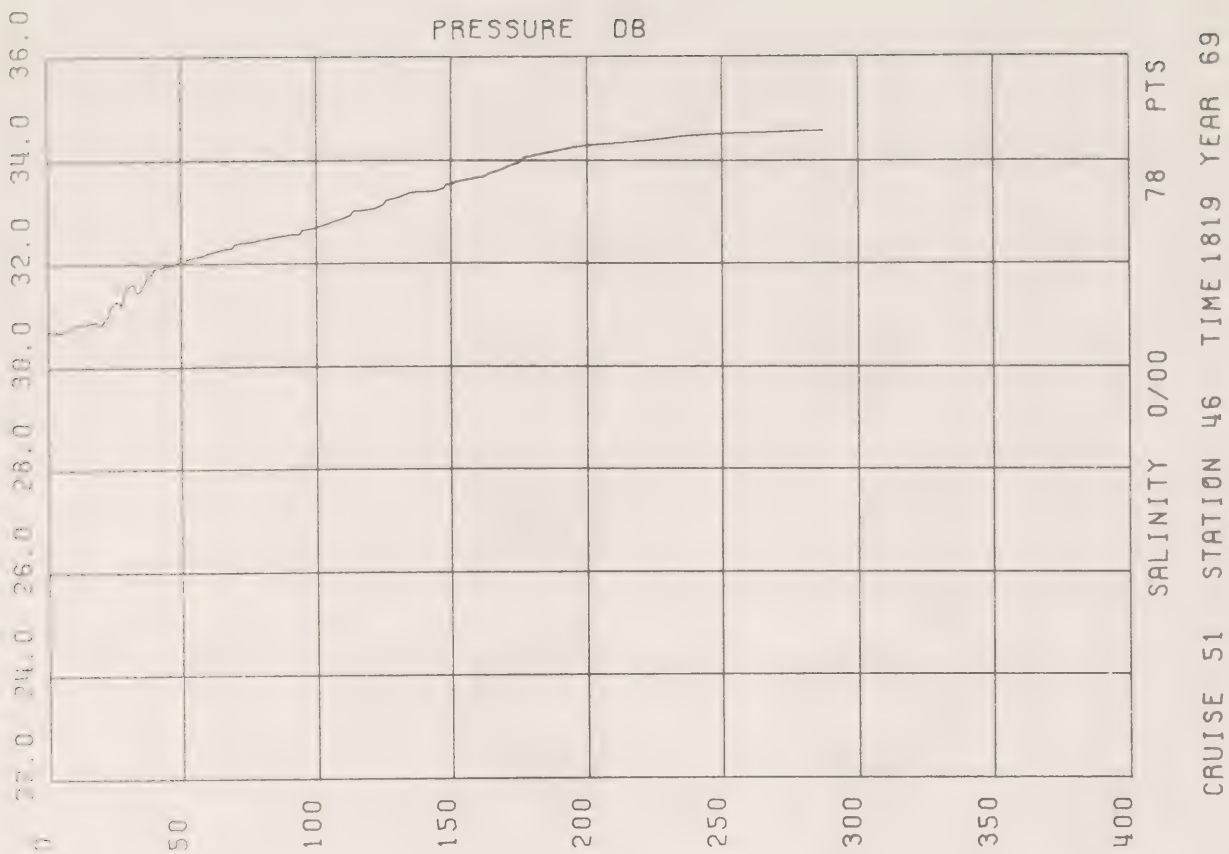
GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	9.309A	9.308	30.478A	2356	2356	1482.2A	44	2	4341
	20.0	20.2A	8.091C	8.089	30.826B	2401	2401	1478.2A	85	9	3910
	30.0	30.2A	5.769C	5.767	31.253A	2465	2465	1469.7A	121	18	3300



CRUISE NUMBER 69051		STATION NUMBER 045	
LAT N49	0.00	YEAR 1969	WAVE-P/H
LONG W 61	45.00	MONTH 9	SWEL-P/H
DEPTH	40.0	DAY 24	SWEL-D
MARSD SQ		H/M 1730	BARO
			1003.8
			WET-BLB
			11.4
			AIR-TEM
			13.5
			WIND-SPD
			03
			WIND-DIR
			230
			WW
			02
			CLD-A
			6
			COUN
			18
			INST
			10
			RFSTR
			06L
			UNAS

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	0.0	0.1	9.440	9.440	30.647	2367	2367	1482.8	0	0	4232
	10.0	10.1A	9.314B	9.313	30.614A	2367	2367	1482.4A	42	2	4239
	20.0	20.2A	8.172B	8.170	30.932C	2408	2408	1478.6A	84	9	3842
	30.0	30.2A	6.390A	6.387	31.250A	2457	2457	1472.2A	121	18	3380

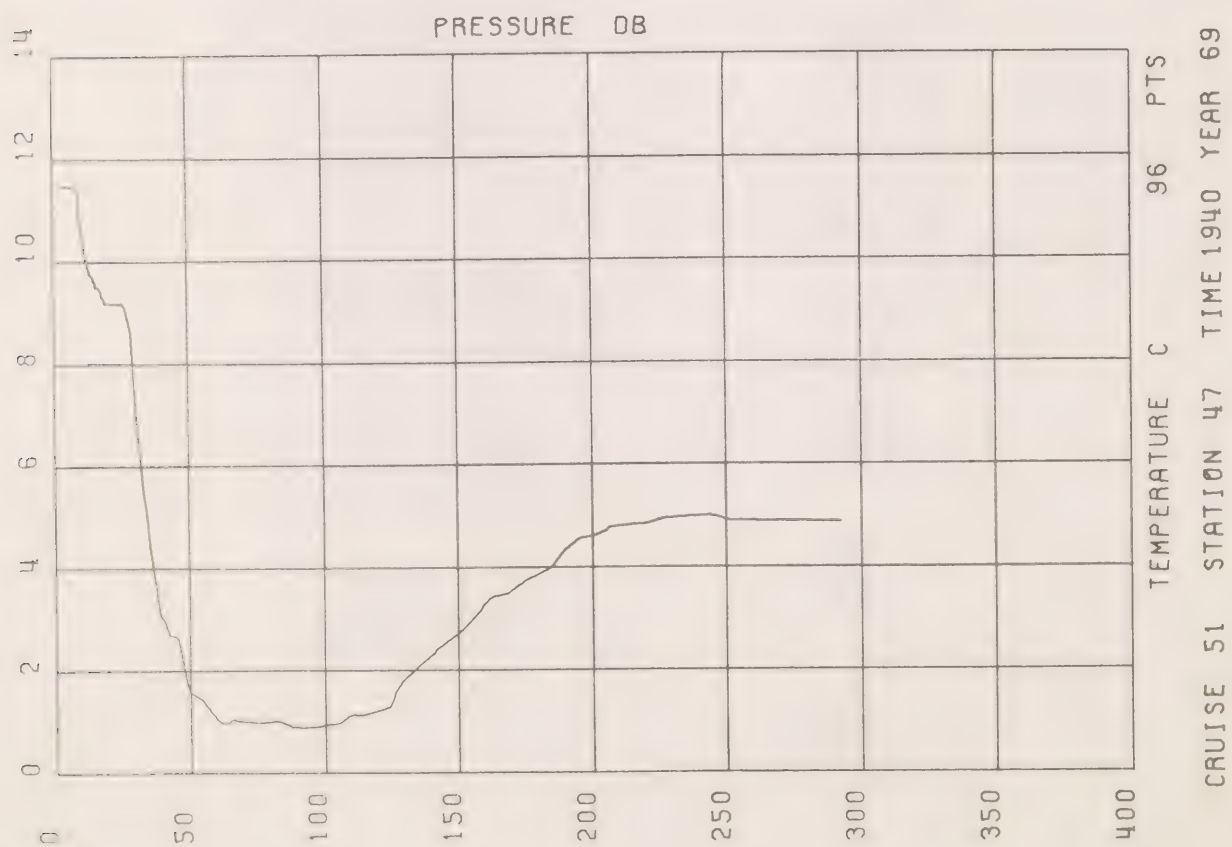
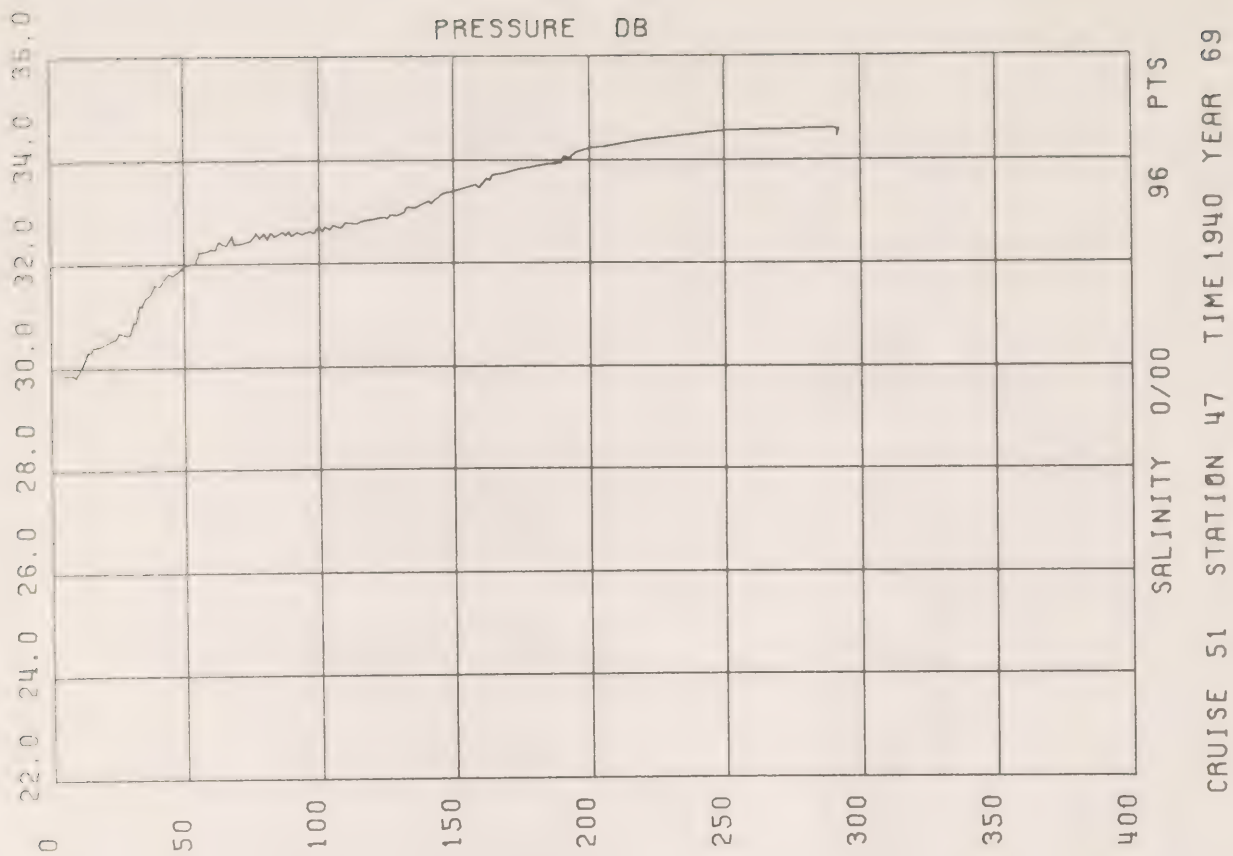


LAT N48 50.00
 LONG W 61 45.00
 DEPTH 296.0
 MARS SQ
 YEAR 1969
 MONTH 9
 DAY 24
 H/M 1822
 WAVE-P/H 0402
 SWEL-P/H 0603
 SWEL-D 200
 BARO 1003.7
 WIND-DIR 210
 WIND-SPD 08
 AIR-TEM 12.2
 WET-BLB 11.0
 COUN 18
 INST 10
 RESTR
 UNAS 07L

CRUISE NUMBER 69051 STATION NUMBER 046

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	9.461W	9.452	30.829C	2380	2380	1483.2A	40	2	4101
	20.0	20.2A	9.075D	9.073	30.771B	2384	2384	1481.9A	81	8	4074
	30.0	30.2A	4.759A	4.757	31.577A	2501	2501	1465.9A	117	17	2954
	50.0	50.4A	0.764B	0.762	32.042B	2570	2570	1449.5A	168	38	2294
	75.0	75.5A	1.112A	1.109	32.417A	2599	2599	1452.0A	223	72	2028
	100.0	100.7A	1.279A	1.275	32.706A	2620	2620	1453.6A	271	117	1318
	125.0	125.9A	2.128A	2.121	33.180B	2652	2652	1458.4A	313	165	1518
	150.0	151.0A	3.011A	3.002	33.549A	2675	2675	1463.2A	349	215	1313
	175.0	176.2A	4.057A	4.044	33.987B	2700	2700	1468.6A	379	265	1084
	200.0	201.4A	4.611A	4.596	34.295A	2718	2718	1471.7A	403	312	916
	225.0	226.6A	4.739A	4.721	34.406A	2726	2726	1472.8A	426	361	849
	250.0	251.8A	4.880A	4.860	34.518A	2733	2733	1474.0A	446	410	783



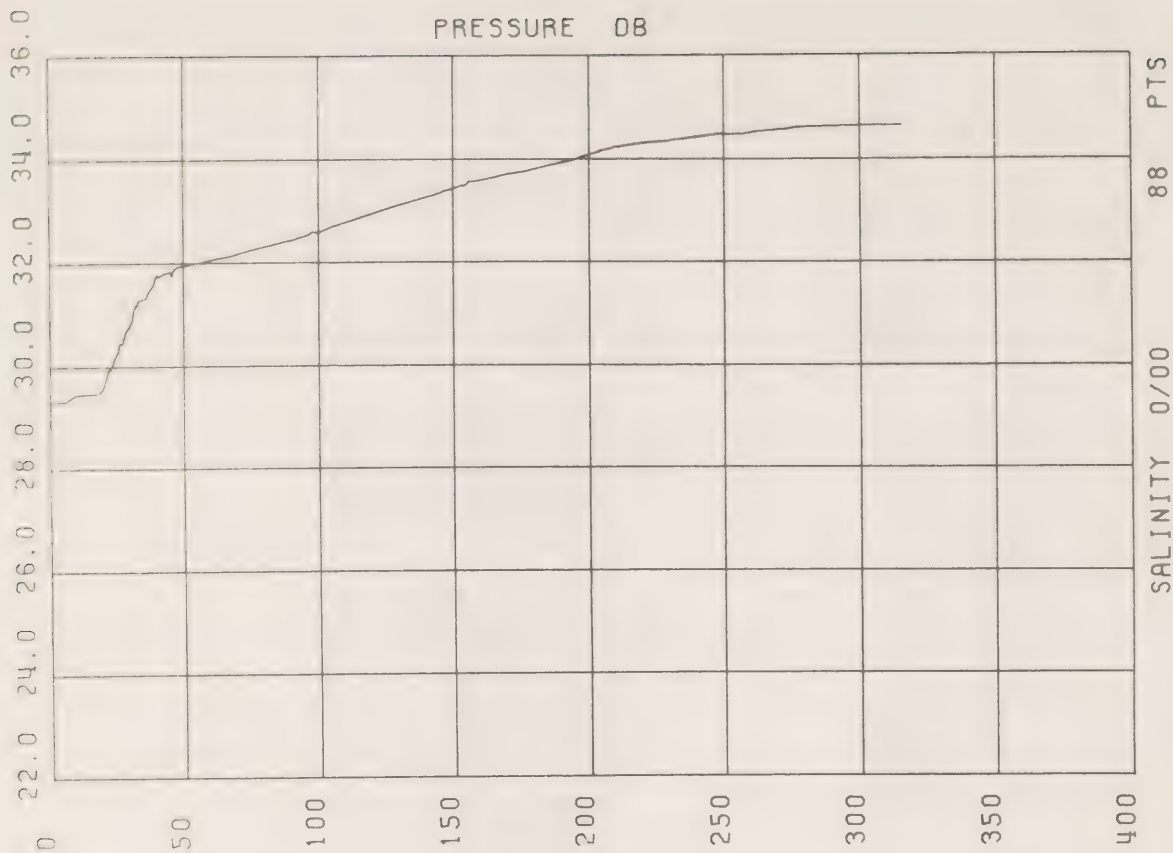
CRUISE NUMBER 69051 STATION NUMBER 047

LAT	N48	50.00	YEAR	1969	WAVE-P/H	0402	WIND-DIR	200	WW	02	COUN	18
LONG	W 62	0.00	MONTH	9	SWEL-P/H		WIND-SPD	05	CLD-A	7	INST	10
DEPTH		292.0	DAY	24	SWEL-D		AIR-TEM				RESTR	
MARSD	SQ		H/M	1943	RARD	1003.7	WET-BLB				UNAS	07K

I N T E R P O L A T E D

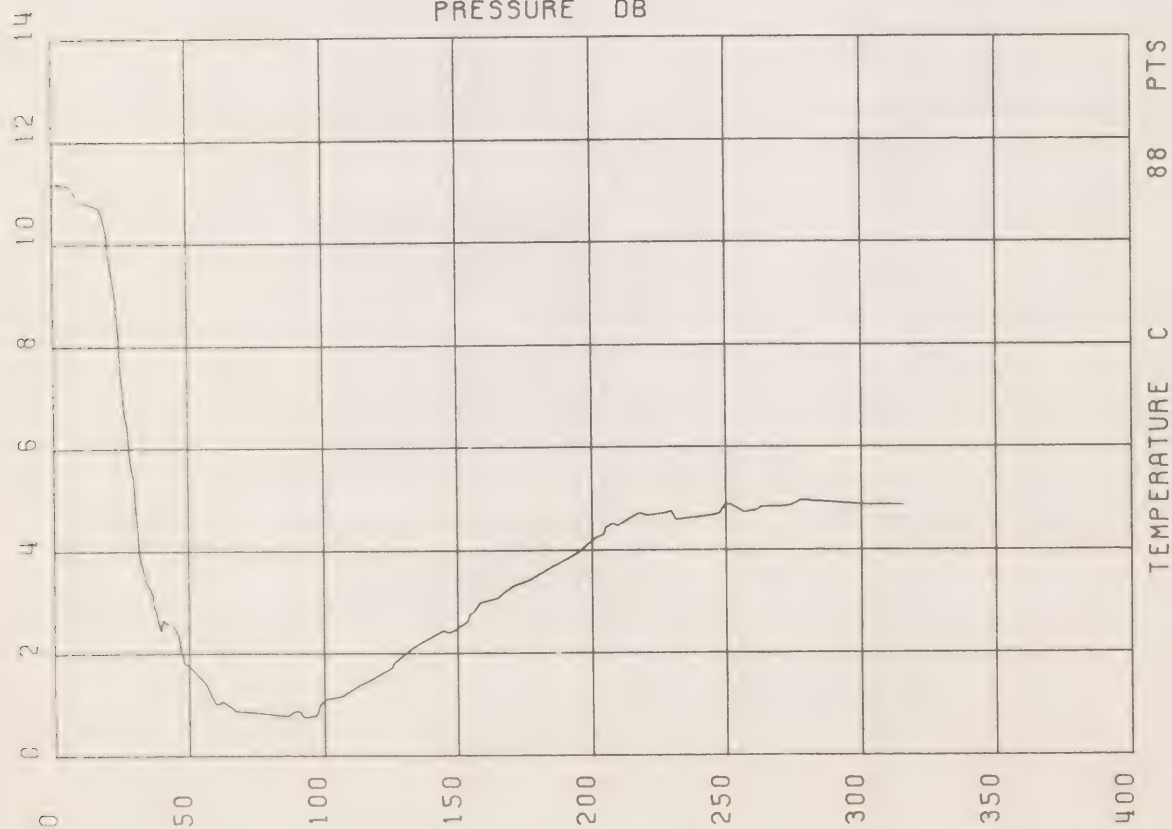
GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	10.767C	10.766	29.887A	2287	2287	1486.8A	35	2	5005
	20.0	20.2A	9.192W	9.121	30.467B	2357	2358	1481.7A	80	10	4324
	30.0	30.2A	7.163B	7.160	30.767W	2407	2407	1474.6A	123	21	3849
	50.0	50.4A	1.541D	1.539	31.991D	2562	2562	1452.8A	180	44	2377
	75.0	75.5A	0.976A	0.973	32.508D	2607	2607	1451.5A	234	77	1950
	100.0	100.7A	0.932W	0.928	32.642D	2619	2619	1451.9W	282	120	1846
	125.0	125.9A	1.457B	1.451	32.907B	2636	2636	1455.0A	326	171	1677
	150.0	151.0	2.740	2.731	33.414	2667	2667	1461.8	365	226	1391
	175.0	176.2A	3.772B	3.760	33.845A	2692	2692	1467.2A	397	279	1163
	200.0	201.4A	4.619A	4.604	34.244A	2714	2714	1471.7A	424	332	955
	225.0	226.6A	4.948A	4.930	34.425A	2725	2725	1473.7A	447	382	858
	250.0	251.8W	4.900W	4.880	34.570W	2737	2737	1474.1W	468	432	747

PRESSURE DB



CRUISE 51 STATION 48 TIME 2032 YEAR 69

PRESSURE DB

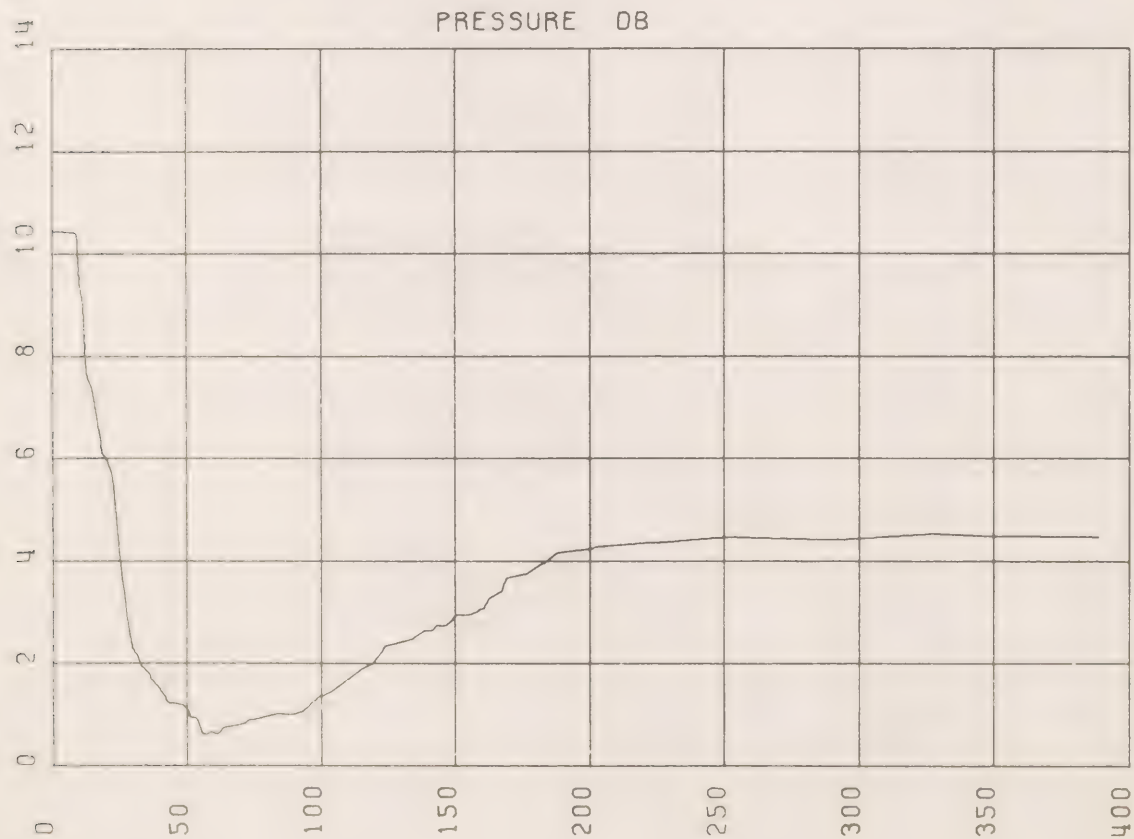
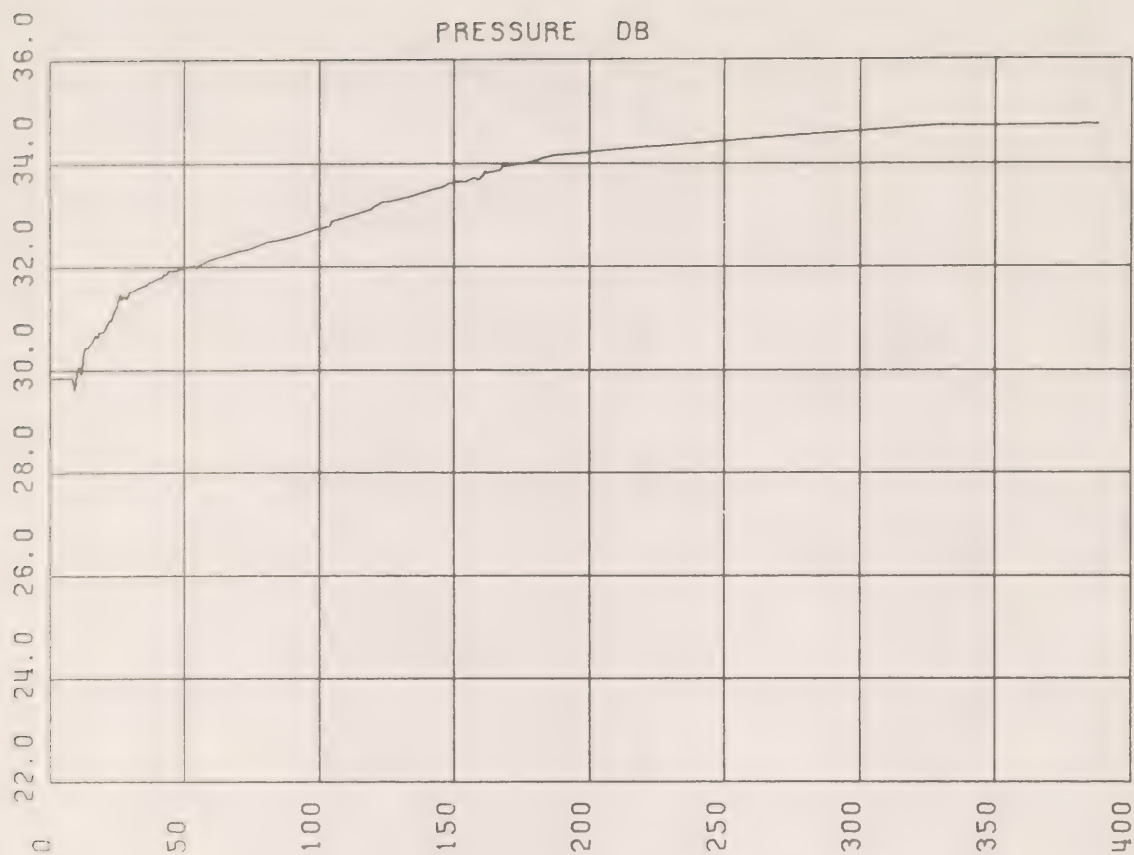


CRUISE 51 STATION 48 TIME 2032 YEAR 69

LAT N48 50.00
 LONG W 62 15.00
 DEPTH 320.0
 MARSD SQ
 YEAR 1969
 MONTH 9
 DAY 24
 H/M 2040
 CRUISE NUMBER 69051
 STATION NUMBER 048
 WAVE-P/H
 SWEL-P/H
 SWEL-D
 BARO
 WIND-DIR 000
 WIND-SPD 00
 AIR-TEM
 WET-BLB
 WW 02
 CLD-A 7
 COUN 18
 INST 10
 RESTR
 UNAS 07J

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	10.836C	10.835	29.458A	2253	2253	1486.6A	49	3	5331
	20.0	20.2A	9.975D	9.973	29.633B	2280	2280	1483.8A	102	11	5068
	30.0	30.2A	4.789A	4.787	30.841A	2443	2443	1465.1A	145	22	3512
	50.0	50.4A	1.724A	1.722	31.951A	2557	2557	1453.6A	201	45	2419
	75.0	75.5A	0.847W	0.844	32.250A	2586	2586	1450.6W	258	81	2140
	100.0	100.7A	1.099C	1.095	32.599B	2613	2613	1452.6A	309	127	1988
	125.0	125.9	1.800	1.794	33.042	2644	2644	1456.8	352	177	1596
	150.0	151.0A	2.503A	2.494	33.439A	2670	2670	1460.8A	389	229	1352
	175.0	176.2	3.390	3.379	33.753	2688	2688	1465.5	421	282	1196
	200.0	201.4A	4.225B	4.210	34.094A	2706	2706	1469.8A	449	336	1023
	225.0	226.6A	4.709W	4.692	34.340A	2721	2721	1472.6A	473	388	895
	250.0	251.8A	4.871C	4.851	34.463A	2729	2729	1473.9A	494	438	820
	300.0	302.2W	4.870W	4.846	34.641W	2743	2743	1474.9W	531	543	696

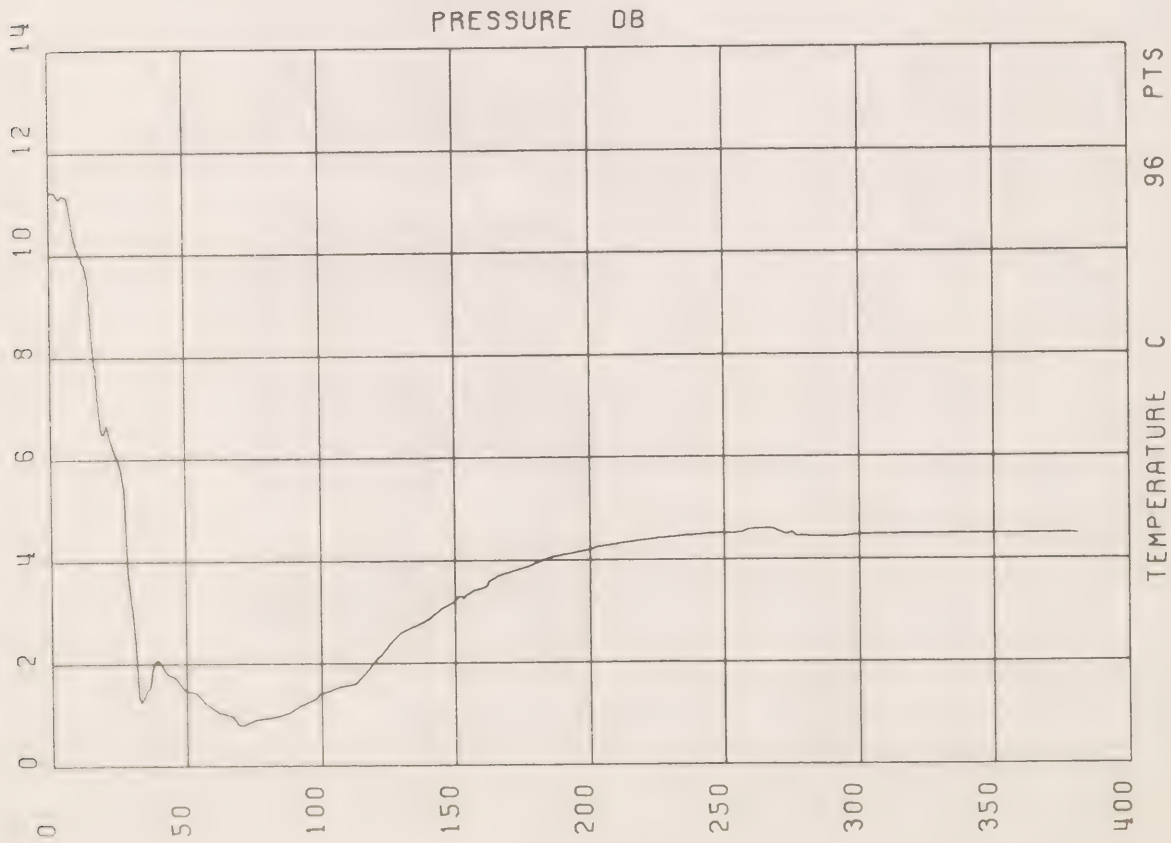
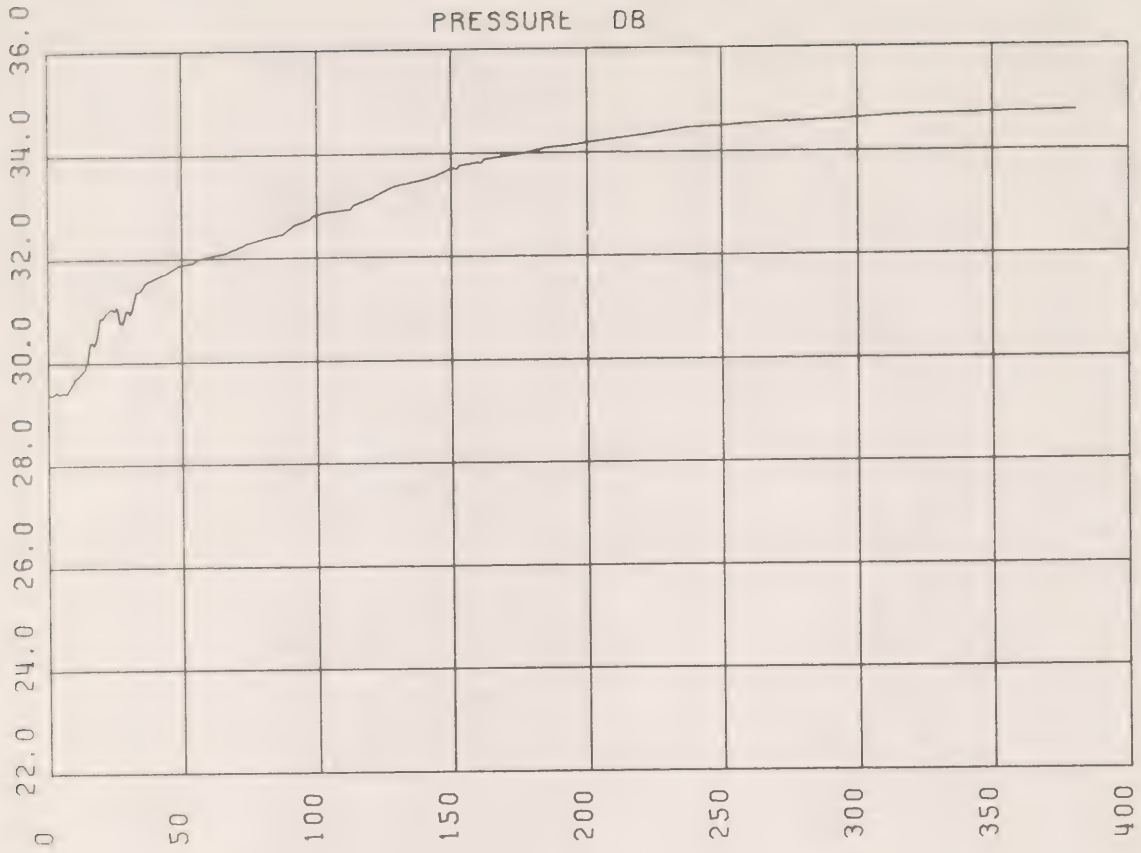


CRUISE NUMBER 69051 STATION NUMBER 049

LAT N48 50.00 YEAR 1969 WAVE-P/H WIND-DIR 000 WW 02
 LONG W 62 30.00 MONTH 9 SWEL-P/H WIND-SPD 00 CLD-A 7
 DEPTH 392.0 DAY 24 SWEL-D AIR-TEM 000
 MARSD SQ H/M 2148 BARO WET-BL3

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	9.407D	9.406	30.016A	2317	2317	1482.0A	46	2	4693
	20.0	20.2A	5.980B	5.978	30.780C	2425	2425	1469.8A	88	9	3679
	30.0	30.2A	2.258E	2.256	31.544C	2521	2521	1455.1A	118	17	2766
	50.0	50.4A	1.113C	1.111	32.004A	2566	2566	1450.9W	170	38	2342
	75.0	75.5	0.900	0.897	32.369	2596	2596	1451.0	225	73	2051
	100.0	100.7A	1.352W	1.348	32.742B	2624	2624	1454.0A	273	116	1794
	125.0	125.9A	2.354A	2.347	33.266A	2658	2658	1459.5A	313	163	1471
	150.0	151.0A	2.944C	2.935	33.653C	2684	2684	1463.0W	348	211	1229
	175.0	176.2A	3.738A	3.726	33.992A	2703	2704	1467.3A	377	250	1050
	200.0	201.4A	4.256A	4.241	34.225A	2717	2717	1470.2A	401	306	929
	225.0	226.6A	4.353A	4.336	34.328A	2723	2724	1471.1A	424	355	964
	250.0	251.8A	4.470A	4.451	34.438A	2731	2731	1472.2A	444	406	798
	300.0	302.2A	4.431A	4.408	34.623A	2746	2746	1473.1A	481	509	660

I N T E R P O L A T E D

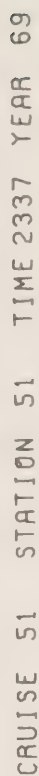


CRUISE NUMBER 69051 STATION NUMBER 050

LAT	N48	50.00	YEAR	1969	WAVE-P/H	WIND-DIR	000	WW	02	COUN	18
LONG	W 62	45.00	MONTH	9	SWEL-P/H	WIND-SPD	00	CLD-A	7	INST	10
DEPTH		385.0	DAY	24	SWEL-D	AIR-TEM				RESTR	
MARSD	SQ		H/M	2242	BARO	1004.5	WET-BLB			UNAS	07H

INTERPOLATED

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	0.0	0.0	11.230	11.230	29.384	2240	2240	1487.7	0	0	5450
	10.0	10.1A	10.090D	10.089	29.696D	2284	2284	1484.1A	54	2	5037
	20.0	20.2A	6.619E	6.617	30.863C	2423	2423	1472.4A	99	10	3702
	30.0	30.2A	2.811B	2.809	30.990C	2473	2473	1456.8A	134	18	3225
	50.0	50.4A	1.456W	1.454	31.882A	2554	2554	1452.4W	188	41	2468
	75.0	75.5A	0.892B	0.889	32.309A	2591	2591	1450.9A	246	78	2097
	100.0	100.7A	1.415A	1.410	32.828A	2630	2630	1454.3A	295	121	1734
	125.0	125.9A	2.386A	2.379	33.295A	2660	2660	1459.6A	335	169	1452
	150.0	151.0A	3.297A	3.287	33.707A	2695	2695	1464.5A	369	215	1219
	175.0	176.2A	3.852A	3.840	33.977A	2701	2701	1467.7A	397	262	1071
	200.0	201.4A	4.218A	4.203	34.194A	2715	2715	1470.0A	423	311	949
	225.0	226.6A	4.411A	4.394	34.371A	2726	2726	1471.4A	445	360	839
	250.0	251.8A	4.500W	4.481	34.498A	2735	2735	1472.4A	465	408	755
	300.0	302.2A	4.471W	4.449	34.629A	2746	2746	1473.2A	500	509	661

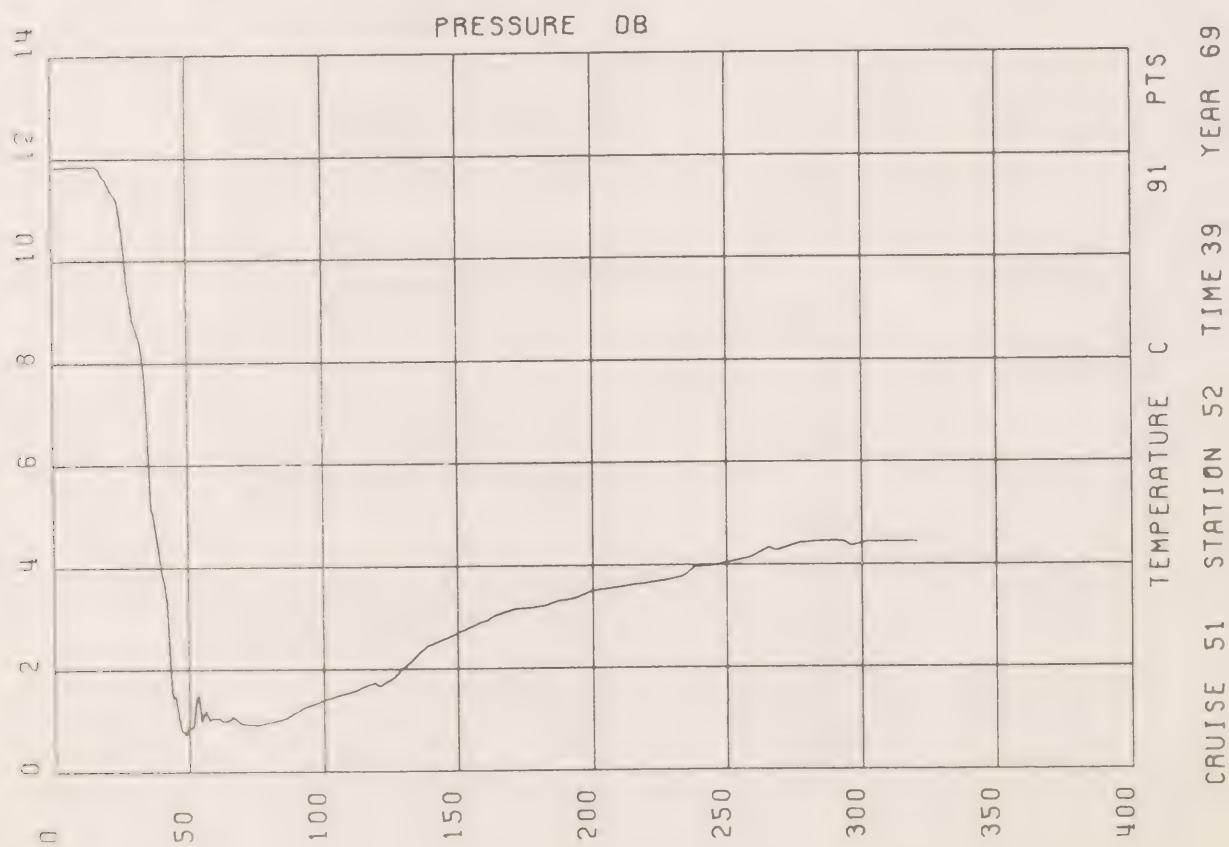
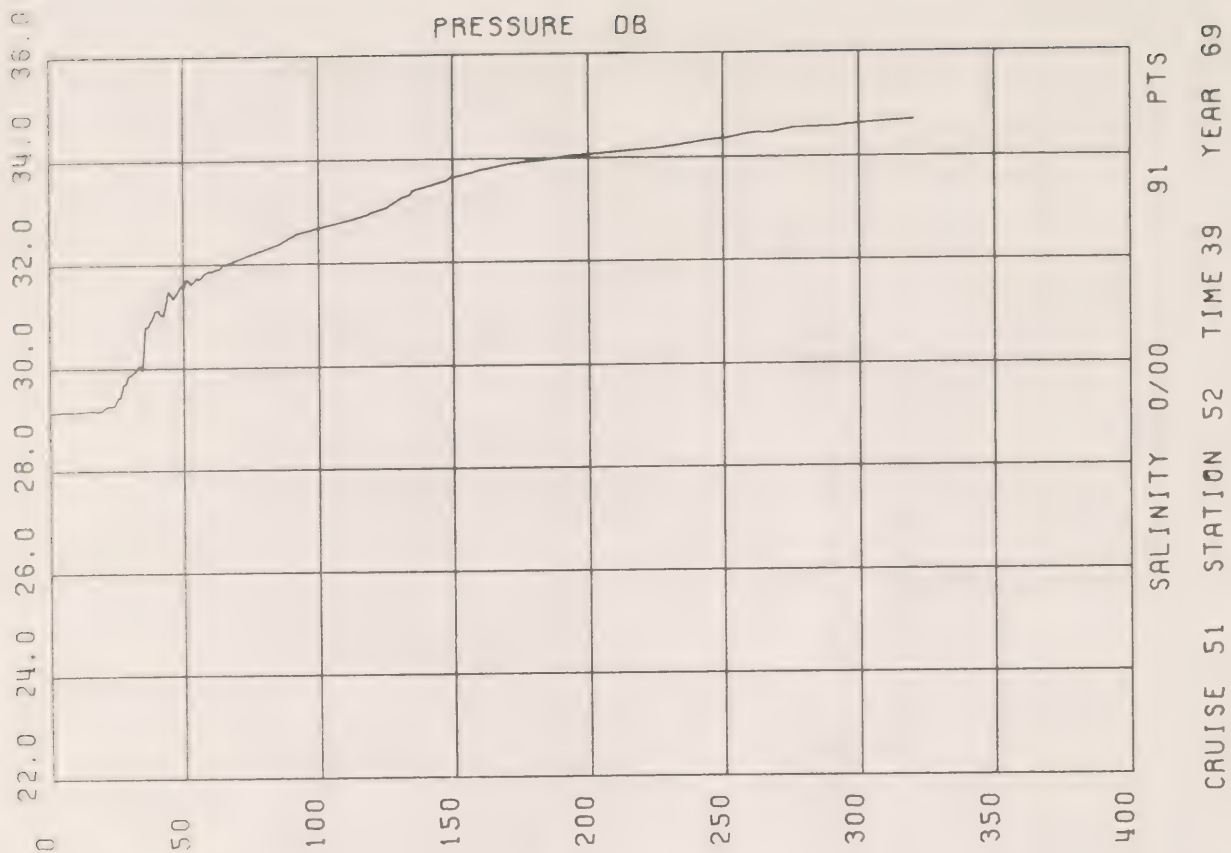


CRUISE NUMBER 69051 STATION NUMBER 051

LAT N48 50.00 YEAR 1969 WAVE-P/H WIND-DIR 090 WW 02
 LONG W 63 0.00 MONTH 9 SWEL-P/H WIND-SPD 02 CLD-A 7
 DEPTH 400.0 DAY 24 SWEL-D AIR-TEM
 MARSD SQ H/M 2338 BARO 1004.5 WET-BLB
 COUN 18
 INST 10
 RESTR
 UNAS 07G

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.094W	11.098	29.325A	2237	2237	1487.3A	52	3	5476
	20.0	20.2A	9.012C	9.010	30.034C	2327	2327	1480.6A	105	11	4625
	30.0	30.2A	6.856A	6.853	30.864A	2421	2421	1473.6W	146	21	3724
	50.0	50.4A	1.872A	1.870	31.662A	2534	2534	1453.9A	210	47	2648
	75.0	75.5A	1.021C	1.018	32.193B	2581	2581	1451.3W	271	86	2193
	100.0	100.7A	1.062W	1.058	32.599A	2614	2614	1452.5A	323	132	1885
	125.0	125.9A	1.821A	1.815	33.015A	2641	2643	1456.8A	366	182	1621
	150.0	151.0A	2.861A	2.852	33.514A	2674	2674	1462.4A	404	235	1326
	175.0	176.2A	3.680A	3.668	33.860A	2693	2693	1466.9A	434	286	1142
	200.0	201.4A	4.034A	4.020	34.079A	2707	2708	1469.1A	461	337	1016
	225.0	226.6	4.280	4.263	34.265	2719	2720	1470.7	485	390	904
	250.0	251.8A	4.469A	4.450	34.399A	2728	2728	1472.1W	507	443	826
	300.0	302.2A	4.460W	4.437	34.594A	2744	2744	1473.2A	545	550	685

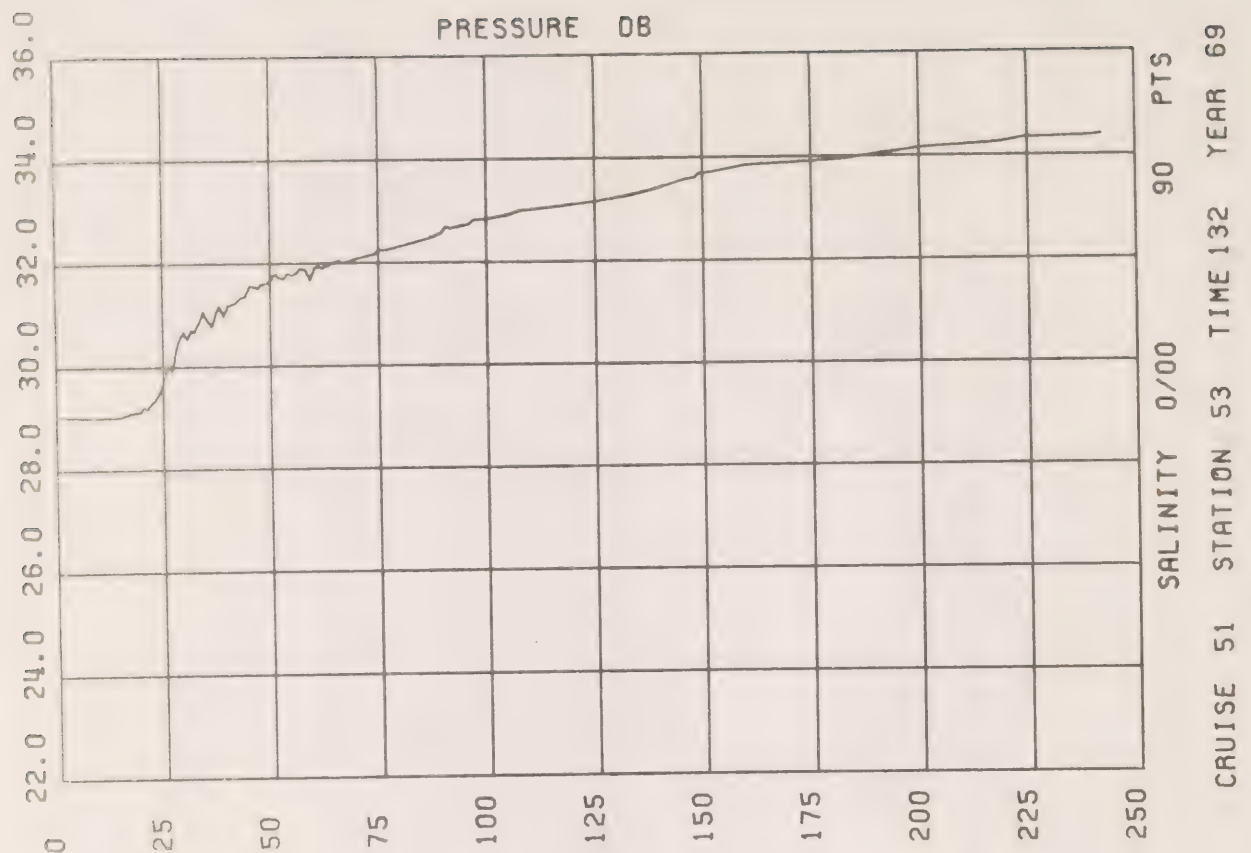


CRUISE NUMBER 69051 STATION NUMBER 052

LAT N48 50.00 YEAR 1969 WAVE-P/H WIND-DIR 000 WW C2
 LONG W 63 15.00 MONTH 9 WIND-SPD 00 CLD-A 7
 DEPTH 326.0 DAY 25 SWEL-D BARO 1003.6 AIR-TEM
 MARSD SQ H/M 0042 WET-BLB
 COUN 18
 INST 10
 RESTR
 UNAS 07F

INTERPOLATED

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.841A	11.840	29.150A	2211	2211	1489.7W	53	3	5729
	20.0	20.2A	11.528C	11.525	29.194A	2220	2220	1488.8A	111	12	5644
	30.0	30.2	8.710	8.707	29.879	2318	2318	1479.5	164	25	4703
	50.0	50.4A	0.818C	0.816	31.565C	2532	2532	1449.1A	233	53	2662
	75.0	75.5A	0.901A	0.898	32.187A	2581	2581	1450.7A	294	91	2191
	100.0	100.7A	1.404A	1.390	32.696A	2619	2619	1454.1A	343	136	1473
	125.0	125.9A	1.810A	1.804	33.075A	2646	2646	1456.0A	387	136	1574
	150.0	151.0A	2.712A	2.703	33.647A	2685	2685	1462.0A	421	234	1213
	175.0	176.2A	3.163A	3.152	33.917A	2703	2703	1464.7A	450	282	1051
	200.0	201.4A	3.504A	3.491	34.070A	2712	2712	1466.8A	474	331	908
	225.0	226.6A	3.681A	3.666	34.180A	2719	2719	1468.1A	498	382	907
	250.0	251.8	4.050	4.032	34.367	2730	2730	1470.5	520	435	806
	300.0	302.2A	4.430W	4.407	34.629A	2747	2747	1473.1A	556	537	656

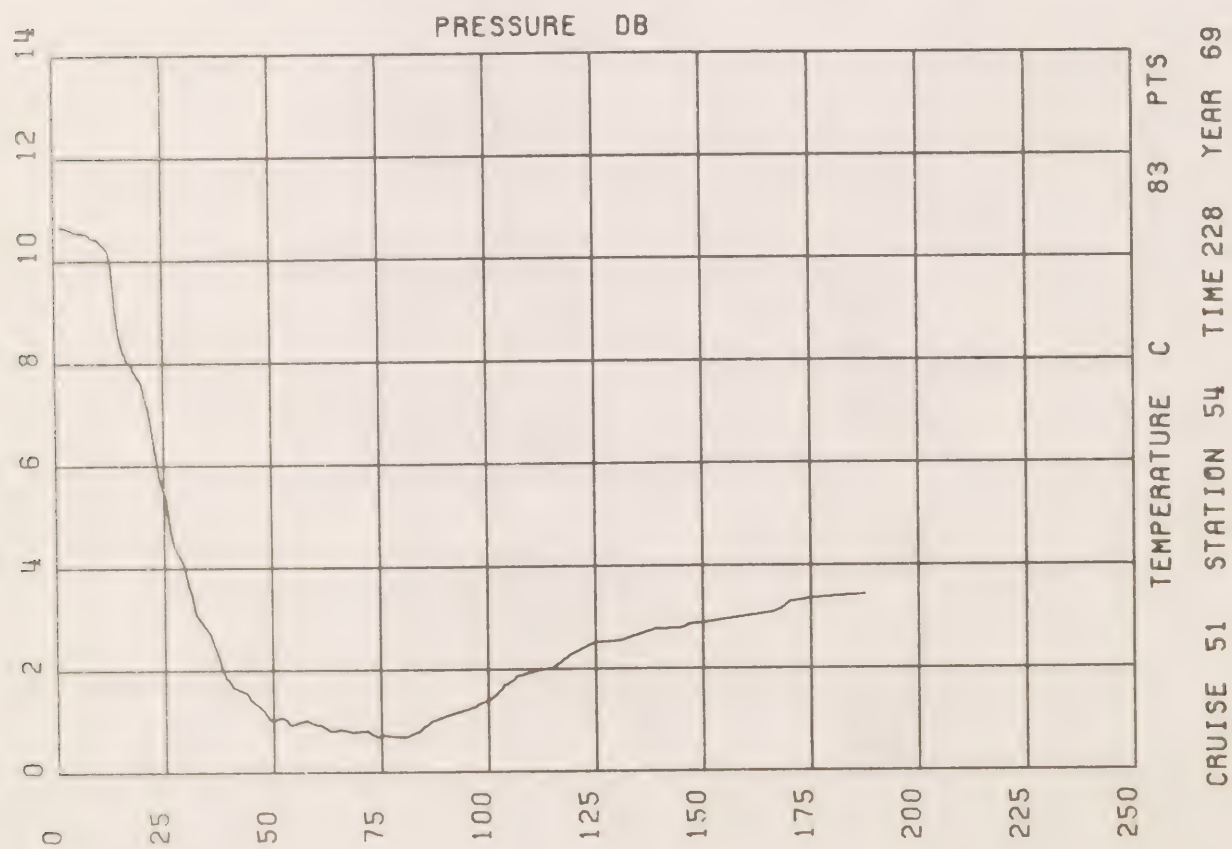
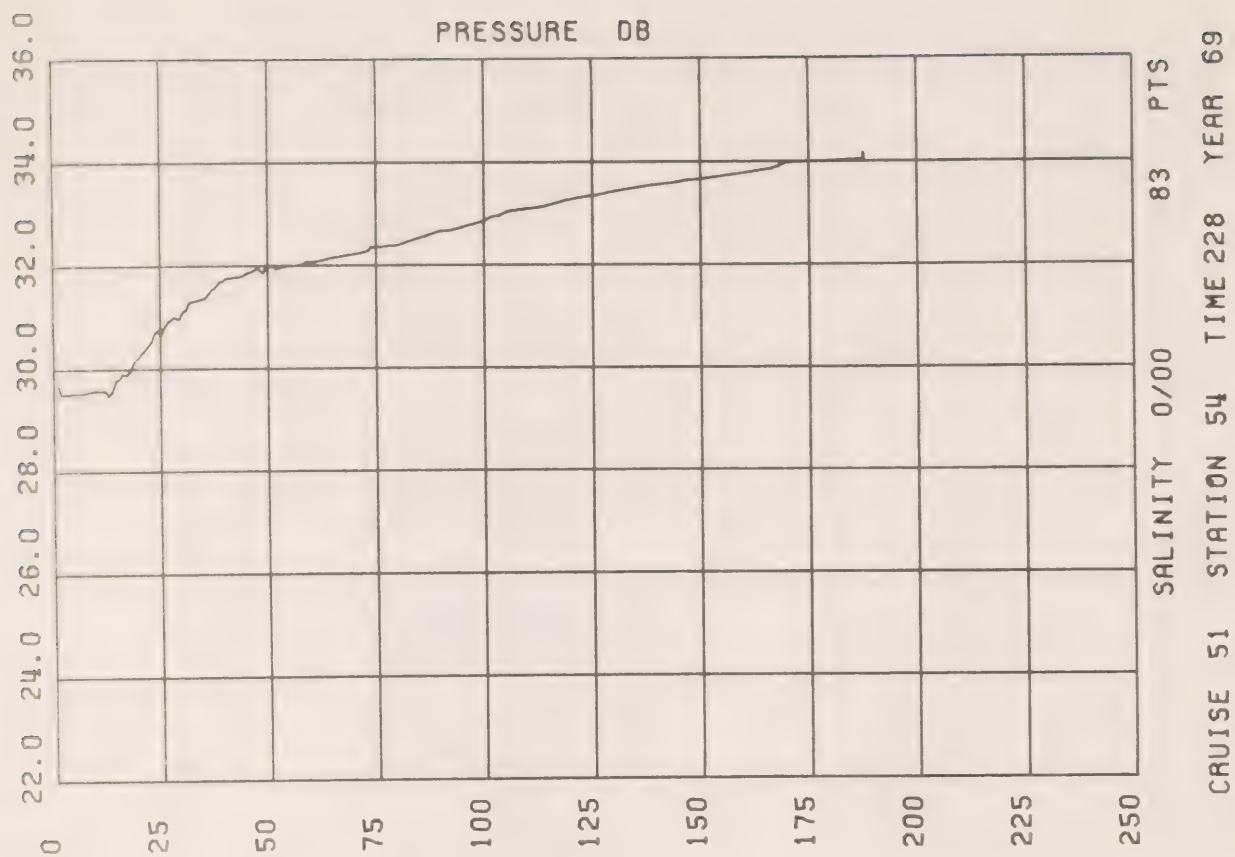


CRUISE NUMBER 69051 STATION NUMBER 053

LAT	N48	50.00	YEAR	1969	WAVE-P/H	WIND-DIR	000	WW	02	COUN	18
LONG	W 63	30.00	MONTH	9	SWEL-P/H	WIND-SPD	00	CLD-A	8	INST	10
DEPTH		248.0	DAY	25	SWEL-D	AIR-TEM				PESTR	
MARSD	SQ		H/M	0133	BARO	WET-BLB				UNAS	07E

INTERPOLATED

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.741W	11.739	29.010A	2202	2202	1489.2W	53	3	5814
	20.0	20.2A	11.200B	11.198	29.161C	2223	2223	1487.7A	111	12	5617
	30.0	30.2A	4.974D	4.972	30.656C	2427	2427	1465.6A	158	24	3670
	50.0	50.4A	1.378W	1.376	31.688A	2539	2539	1451.8A	219	49	2598
	75.0	75.5A	0.852A	0.849	32.261B	2587	2587	1450.6A	279	87	2130
	100.0	100.7A	1.436A	1.430	32.855A	2631	2631	1454.4A	329	131	1715
	125.0	125.9A	1.980A	1.974	33.172A	2653	2653	1457.8A	369	177	1513
	150.0	151.0A	2.845B	2.836	33.706B	2689	2689	1462.6A	403	225	1180
	175.0	176.2A	3.166A	3.155	33.911A	2702	2702	1464.7A	431	271	1056
	200.0	201.4A	3.623A	3.609	34.167A	2718	2718	1467.4A	455	319	907
	225.0	226.6W	3.952W	3.936	34.338W	2729	2729	1469.4W	477	367	816

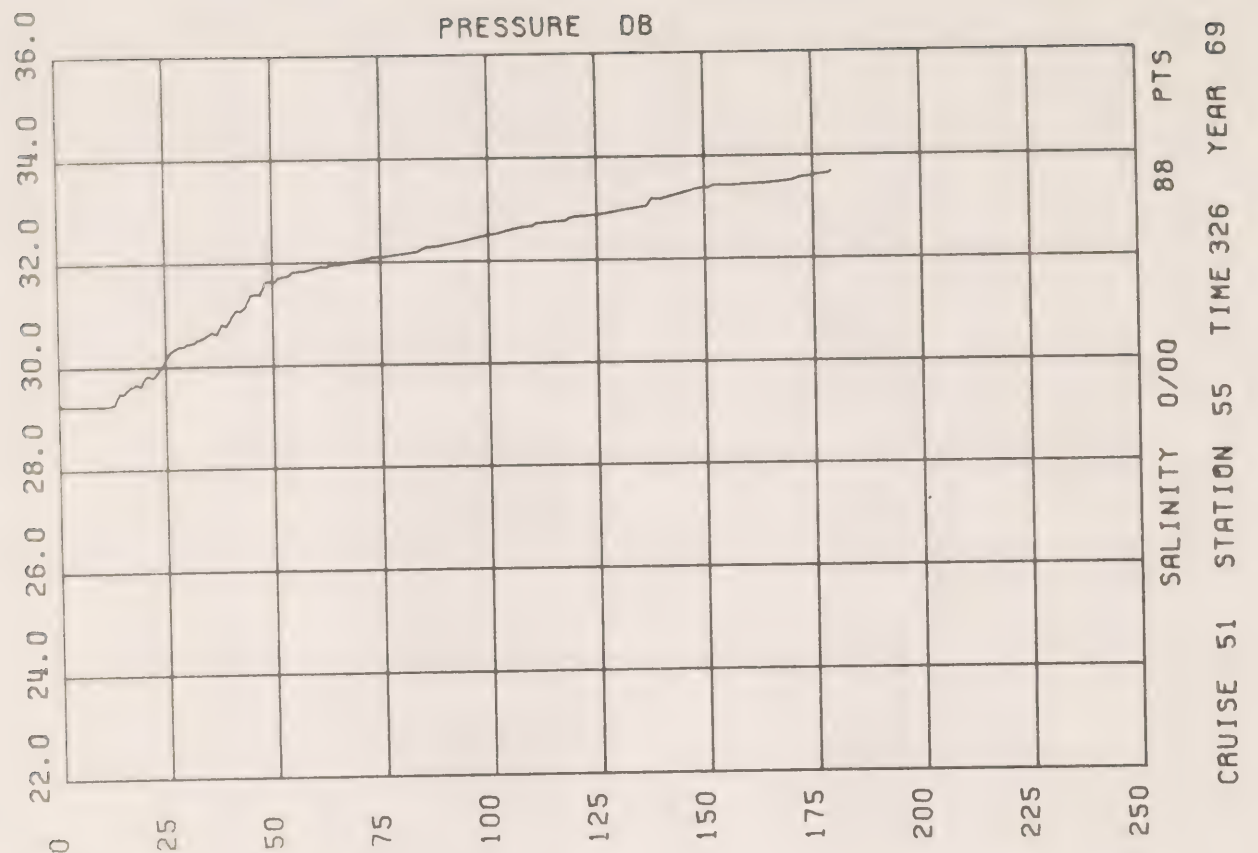


CRUISE NUMBER 69051 STATION NUMBER 054

LAT N48 50.00 YEAR 1969 WAVE-P/H WIND-DIR 000 COUN 18
 LONG W 63 45.00 MONTH 9 SWEL-P/H WIND-SPD 00 INST 10
 DEPTH 192.0 DAY 25 SWEL-D AIR-TEM 11.0 RESTR
 MARSQ SQ H/M 0228 BARO 1004.2 WET-BLB 10.6 UNAS 07D

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	10.379W	10.378	29.580B	2269	2269	1485.0W	47	2	5176
	20.0	20.2A	7.470B	7.468	30.240A	2364	2364	1475.0A	96	10	4266
	30.0	30.2A	3.703B	3.701	31.106A	2475	2475	1460.8A	132	19	3210
	50.0	50.4A	1.031W	1.029	32.008B	2566	2566	1450.6W	186	41	2332
	75.0	75.5A	0.723C	0.720	32.351A	2596	2596	1450.1W	243	78	2056
	100.0	100.7A	1.420A	1.415	32.882A	2634	2634	1454.5A	290	120	1694
	125.0	125.9A	2.512A	2.505	33.353A	2663	2663	1460.3A	328	104	1417
	150.0	151.0A	2.895A	2.886	33.665A	2685	2685	1462.8A	362	210	1215
	175.0	176.2W	3.355W	3.344	34.001W	2708	2708	1465.6W	389	257	1005

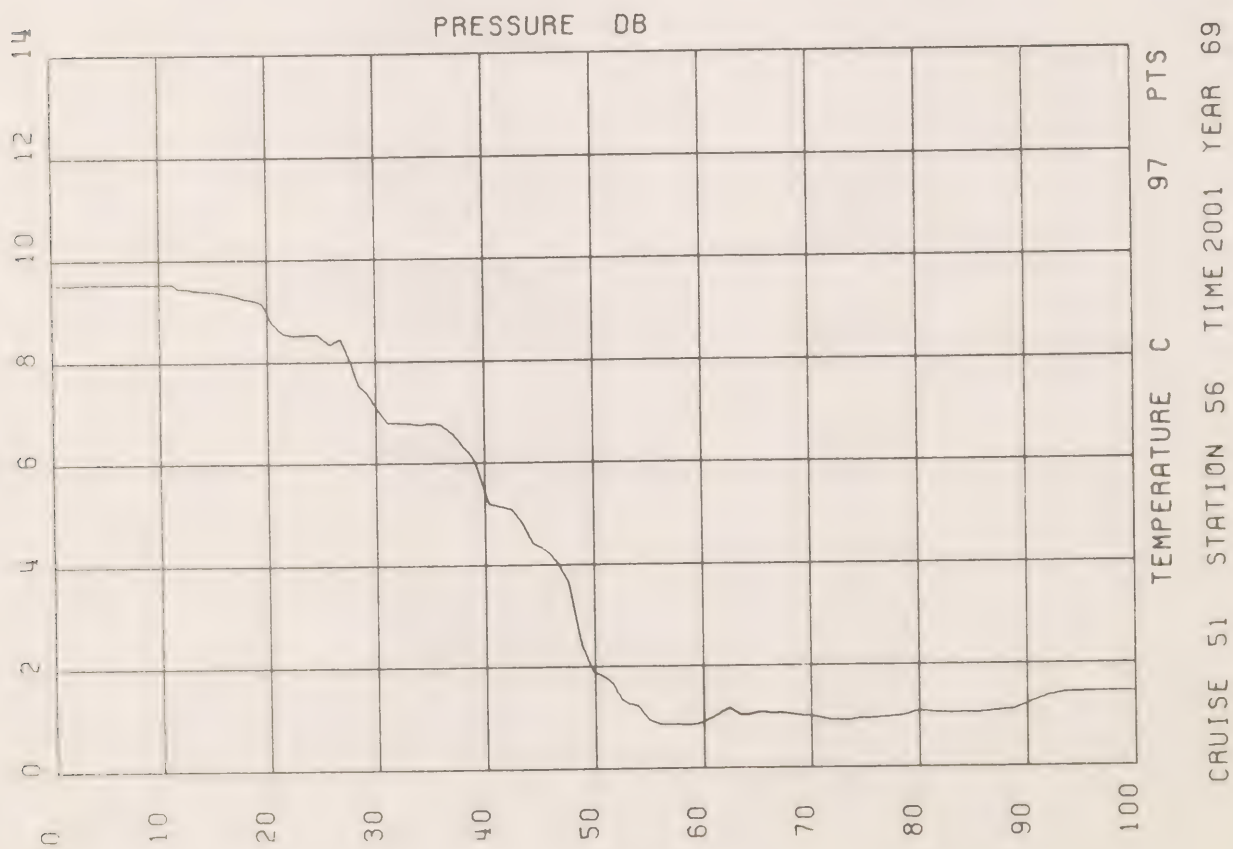
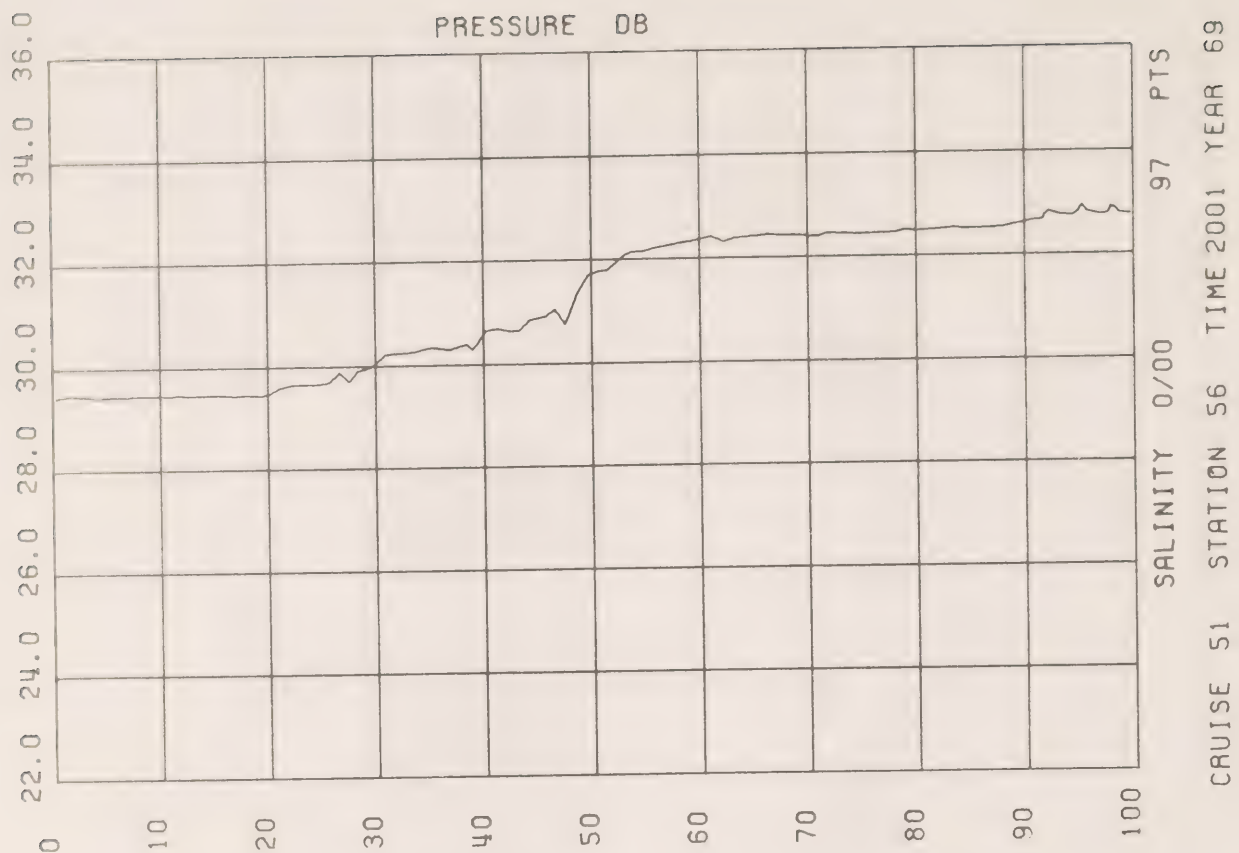


CRUISE NUMBER 69051 STATION NUMBER 055

LAT	N48	50.00	YEAR	1969	WAVE-P/H	WIND-DIR	000	WV	02	COUN	18
LONG	W 64	0.00	MONTH	9	SWEL-P/H	WIND-SPD	00	CLD-A	8	INST	10
DEPTH		186.0	DAY	25	SWEL-D	AIR-TEM	11.5			RESTR	
MARSD	SQ		H/M	0330	BARO	WFT-BLB	10.0			UNAS	07C

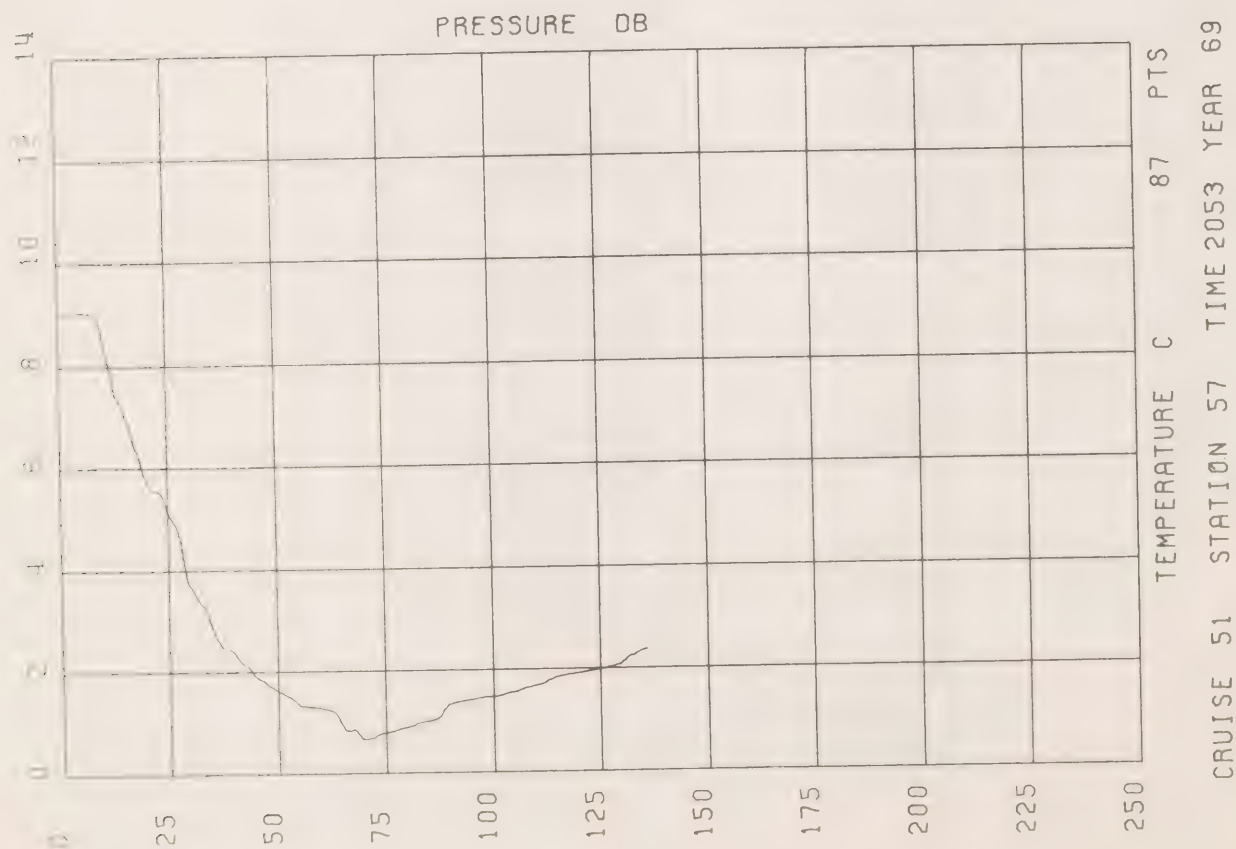
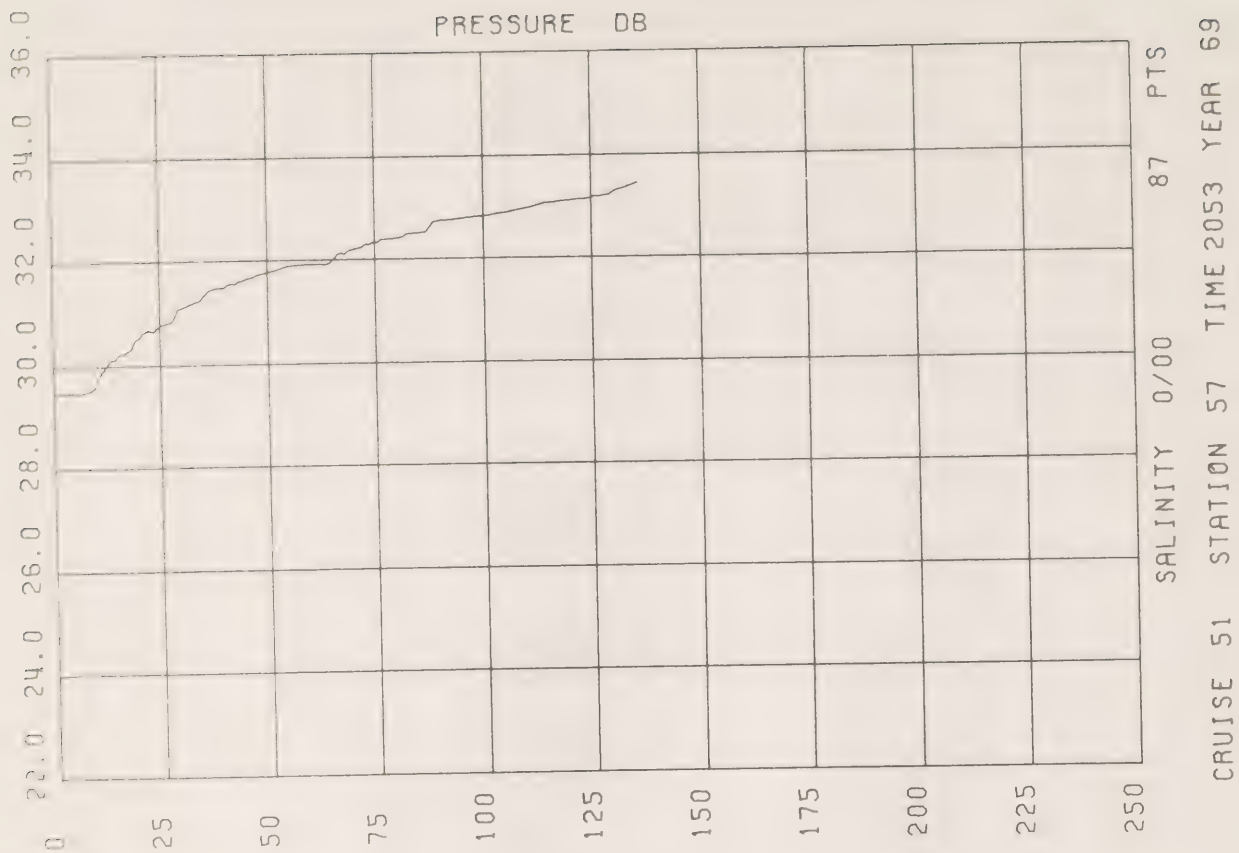
I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	9.910W	9.909	29.231A	2250	2250	1482.9W	52	3	5357
	20.0	20.2A	8.396C	8.394	29.783A	2315	2315	1478.0A	104	11	4729
	30.0	30.2A	6.332A	6.329	30.434A	2393	2393	1470.8W	147	22	3983
	50.0	50.4A	1.987A	1.985	31.612A	2529	2529	1454.4W	216	49	2693
	75.0	75.5A	0.718B	0.715	32.105A	2577	2577	1449.8W	276	88	2239
	100.0	100.7A	0.857A	0.853	32.524A	2608	2608	1451.4A	329	135	1931
	125.0	125.9A	1.490B	1.484	32.893A	2634	2634	1455.1A	374	187	1690
	150.0	151.0A	2.456A	2.448	33.385W	2667	2667	1460.5A	412	242	1391
	175.0	176.2	2.790	2.780	33.627	2683	2683	1462.7	446	297	1236



LAT	N48	40.00	YEAR	1969	WAVE-P/H	WIND-DIR	WV	COUN	18
LONG	W 64	0.00	MONTH	9	SWEL-P/H	WIND-SPD	CLD--A	INST	10
DEPTH		105.0	DAY	25	SWEL-D	AIR-TEM		RESTR	
MARSD	SQ		H/M	2002	BARO	WET-BLB		UNAS	08C
					1011.7				

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	9.530W	9.529	29.451A	2273	2273	1481.7W	50	2	5137
	20.0	20.2	8.800	8.798	29.482	2286	2286	1479.2	102	11	5010
	30.0	30.2A	7.017B	7.014	30.048A	2354	2354	1473.1W	150	23	4355
	50.0	50.4A	1.348C	1.846	31.768C	2542	2542	1453.9A	224	53	2567
	75.0	75.5A	0.962A	0.959	32.437A	2601	2601	1451.3W	277	87	2003



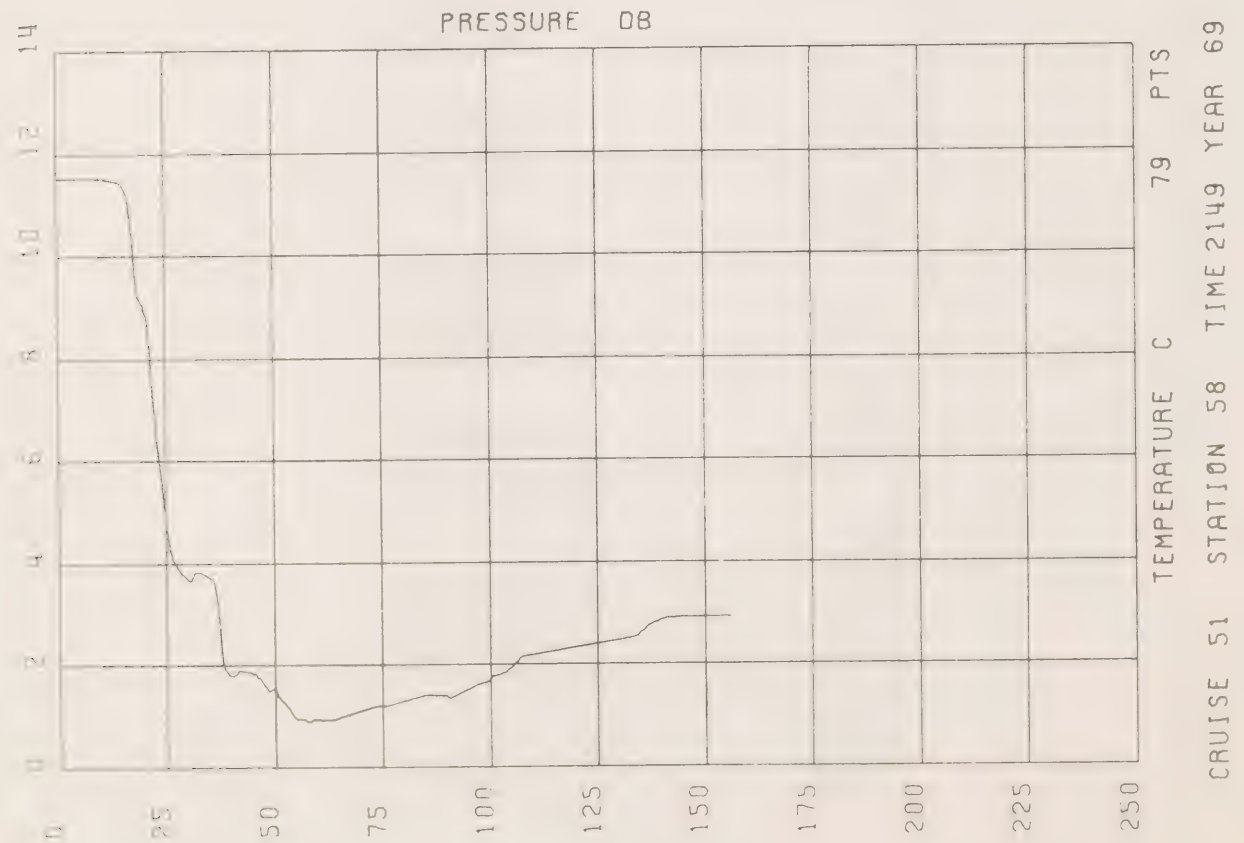
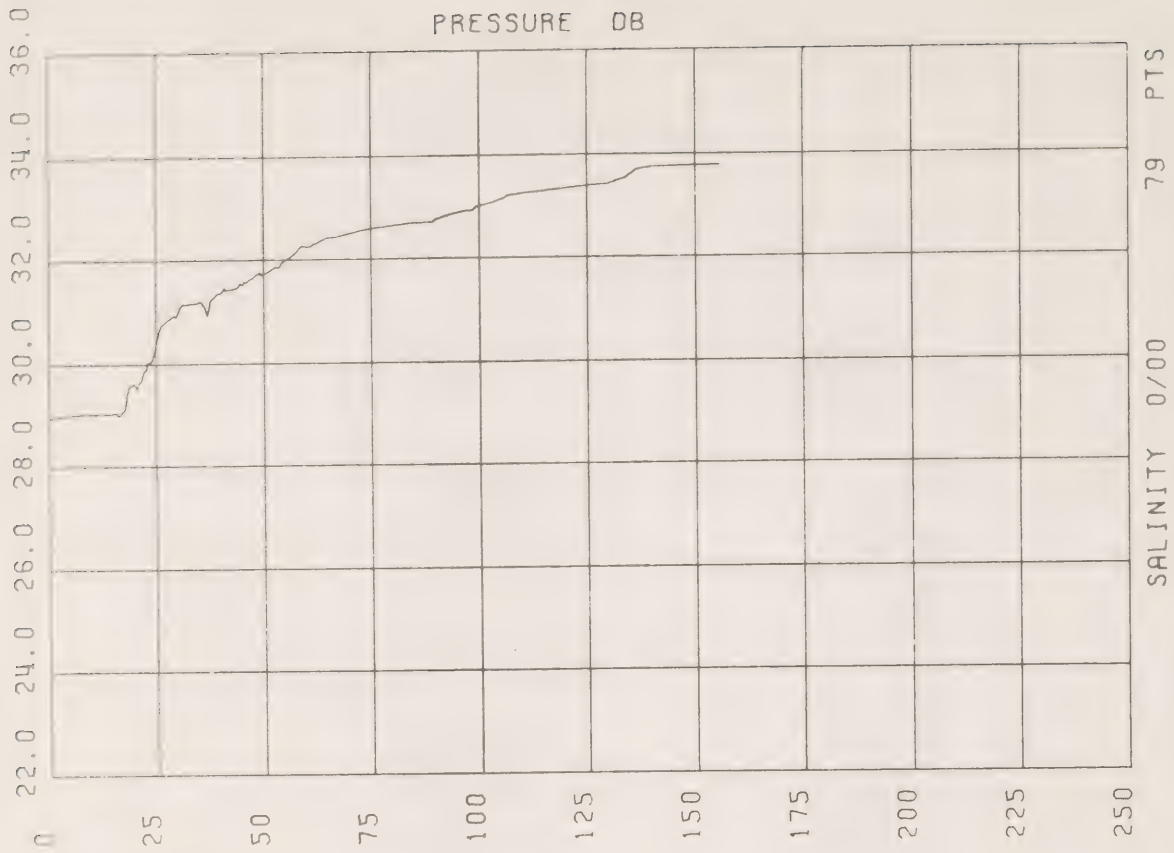
CRUISE NUMBER 69051 STATION NUMBER 057

LAT	N48	40.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 63	45.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		140.0	DAY	25	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	2050	BARO	WET-BLB	UNAS	08D

WV
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.536C	8.535	29.698B	2307	2307	1478.3A	48	3	4811
	20.0	20.2A	5.762A	5.760	30.546A	2409	2409	1468.5A	91	9	3834
	30.0	30.2A	3.645A	3.643	31.115A	2475	2475	1460.6A	127	18	3199
	50.0	50.4A	1.611A	1.609	31.783A	2545	2545	1452.9W	183	41	2540
	75.0	75.5A	0.788A	0.785	32.325A	2593	2593	1450.4A	243	79	2078
	100.0	100.7A	1.471A	1.466	32.833A	2630	2630	1454.6W	289	121	1734
	125.0	125.9A	1.986A	1.980	33.193A	2655	2655	1457.8A	330	167	1497

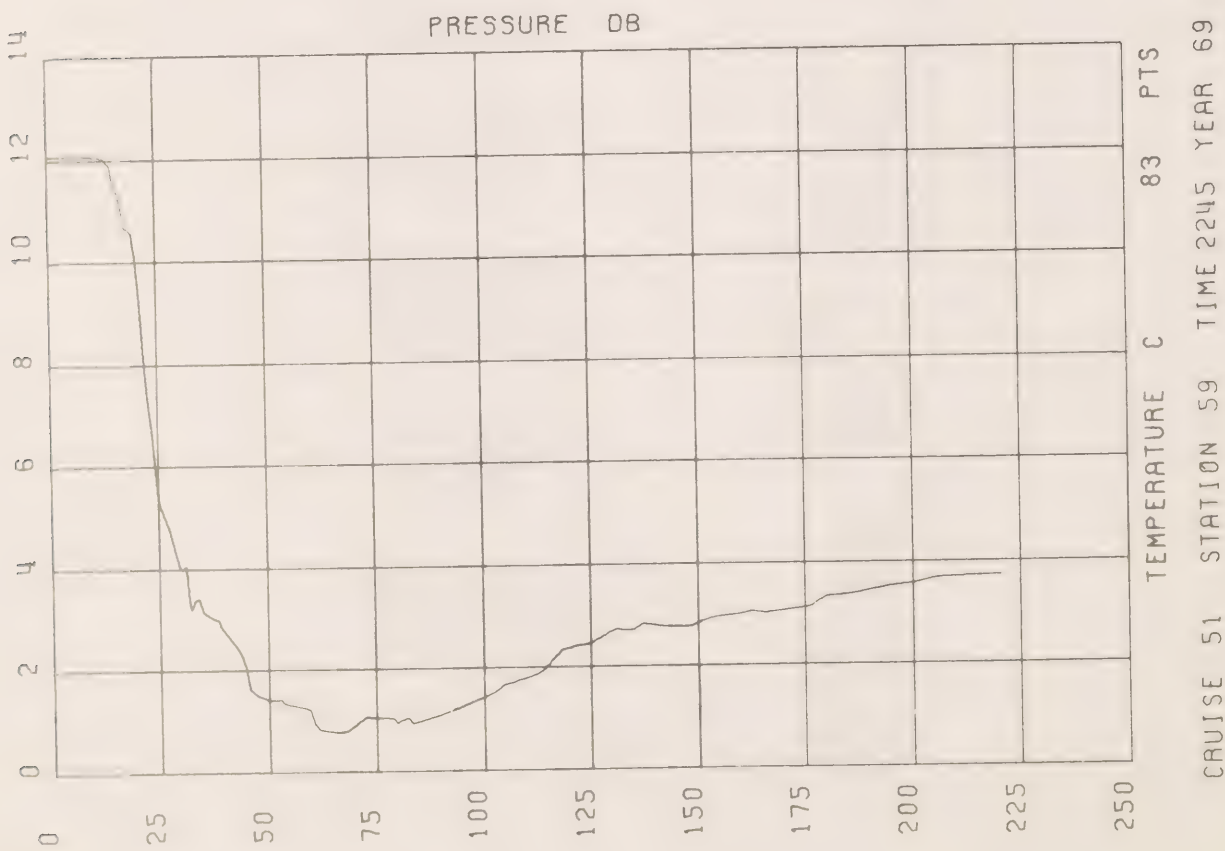
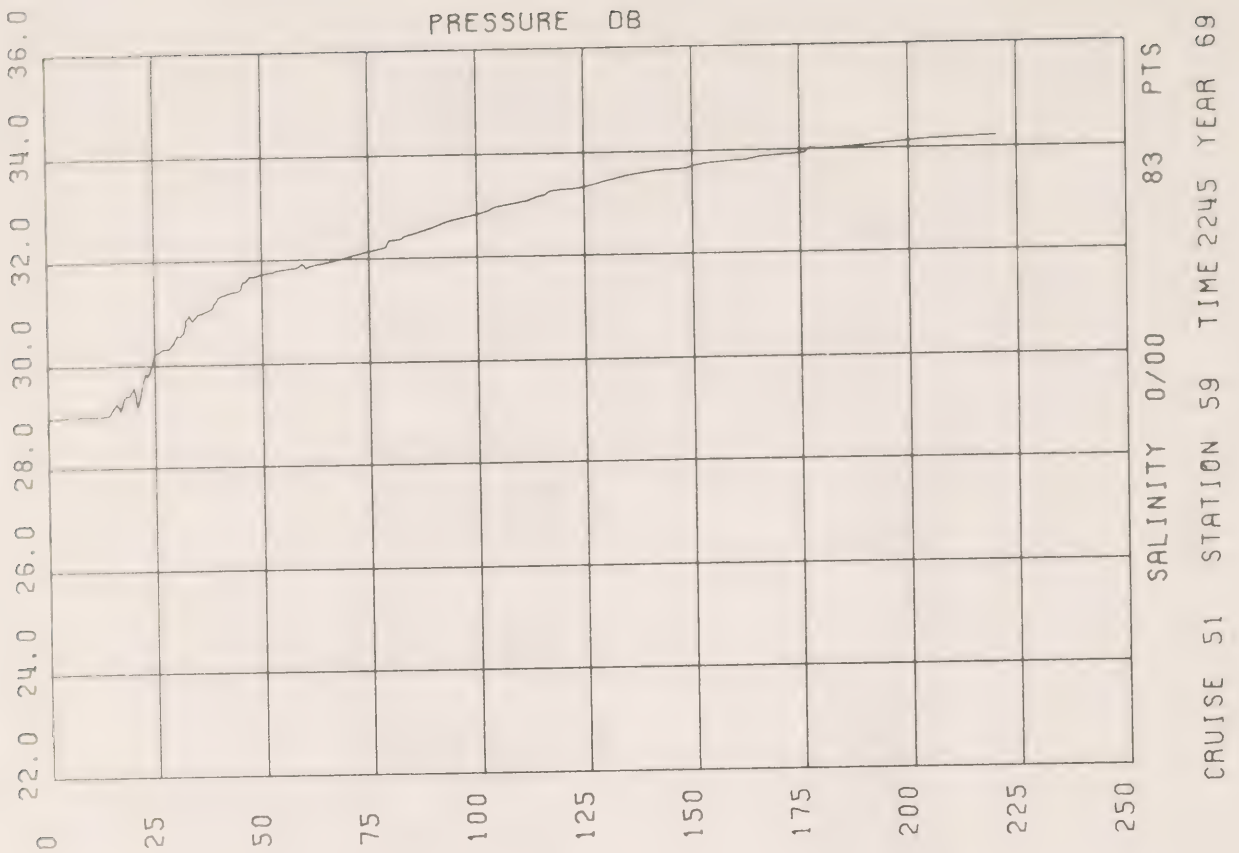


CRUISE NUMBER 69051 STATION NUMBER 058

LAT	N48	40.00	YEAR	1969	WAVE-P/H	WIND-DIR	040	WW	COUN	18
LONG	W 63	30.00	MONTH	9	SWEL-P/H	WIND-SPD	18	CLD-A	INST	10
DEPTH		160.0	DAY	25	SWEL-D	AIR-TEM			RESTR	
MARSD	SQ		H/M	2150	BARO	1012.8	WET-BLB		UNAS	08E

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	0.0	0.1	11.520	11.520	28.954	2201	2201	1488.2	0	0	5817
	10.0	10.1A	11.514W	11.513	29.017A	2206	2206	1488.4W	58	3	5772
	20.0	20.2A	8.866D	8.864	29.555W	2292	2292	1479.6A	114	12	4954
	30.0	30.2A	3.615A	3.613	31.000A	2467	2467	1460.4W	153	21	3283
	50.0	50.4A	1.388A	1.386	31.733C	2542	2542	1451.9A	211	45	2565
	75.0	75.5	1.180	1.177	32.606	2613	2613	1452.6	266	79	1888
	100.0	100.7A	1.778E	1.773	33.032A	2644	2644	1456.3A	310	120	1604
	125.0	125.9A	2.407A	2.400	33.395A	2668	2668	1459.9A	347	162	1377
	150.0	151.0W	2.930W	2.921	33.762W	2693	2693	1463.1W	377	205	1145



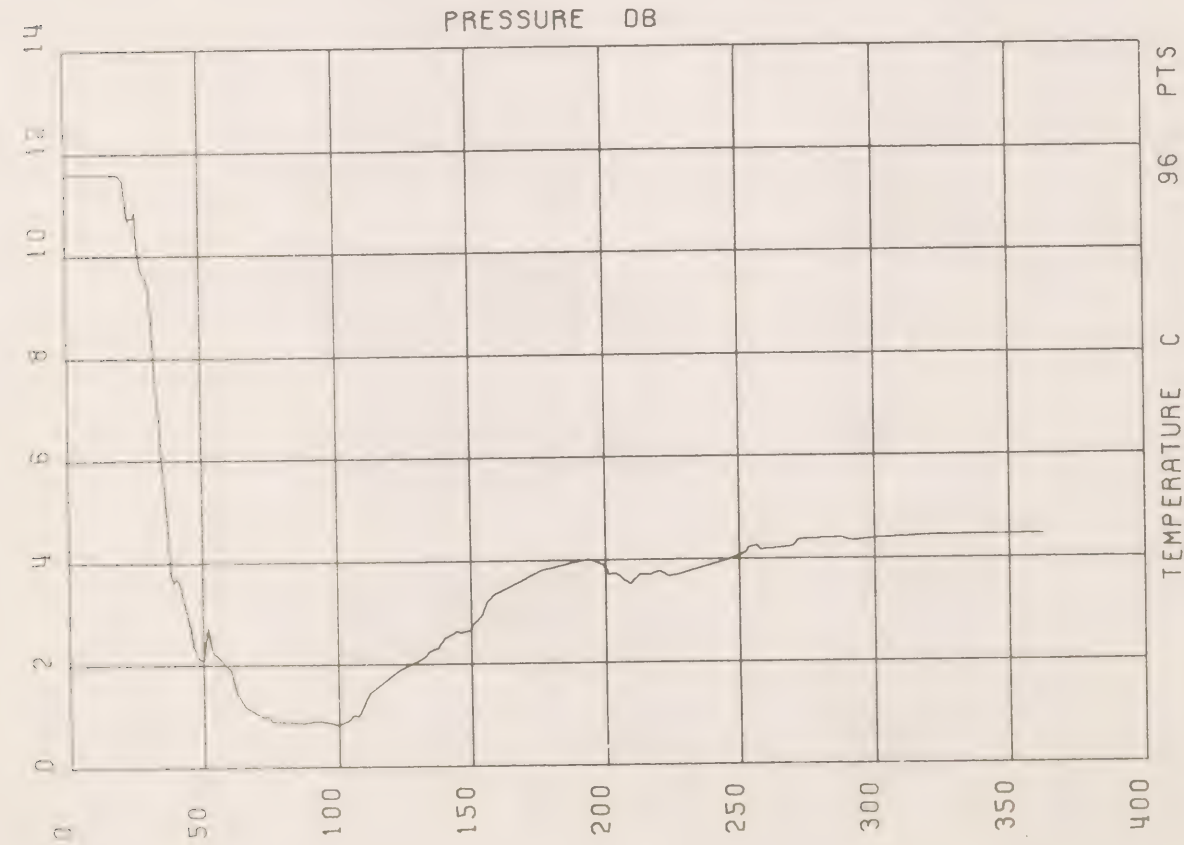
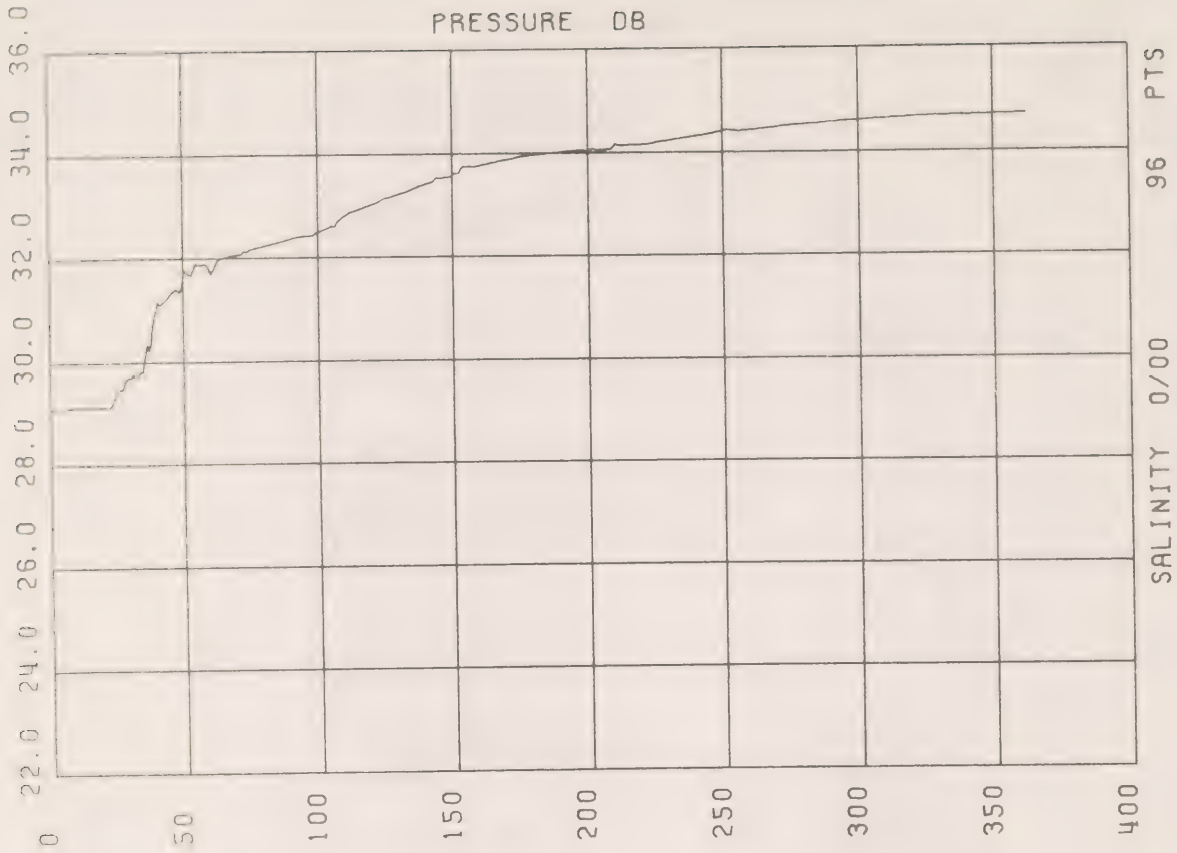
CRUISE NUMBER 69051 STATION NUMBER 059

LAT	N48	40.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 63	15.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		225.0	DAY	25	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	2246	BARO	WET-BLB	UNAS	08F

WV
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	0.0	0.1	12.070	12.070	28.983	2194	2194	1490.2	0	0	5888
	10.0	10.1A	12.079B	12.078	29.000A	2195	2195	1490.4W	59	3	5879
	20.0	20.2A	9.990C	9.988	29.566C	2274	2274	1483.7A	115	12	5123
	30.0	30.2A	3.949A	3.947	30.567A	2430	2430	1461.2A	159	23	3640
	50.0	50.4A	1.397D	1.395	31.732C	2542	2542	1452.0W	220	47	2566
	75.0	75.5A	1.050W	1.047	32.152A	2578	2578	1451.3W	279	85	2225
	100.0	100.7A	1.446A	1.441	32.844A	2631	2631	1454.5A	328	129	1724
	125.0	125.9A	2.474D	2.467	33.347B	2663	2663	1460.2W	367	174	1421
	150.0	151.0A	2.861A	2.852	33.725A	2690	2690	1462.8A	399	220	1167
	175.0	176.2A	3.118A	3.107	33.926A	2704	2704	1464.5A	427	266	1041
	200.0	201.4A	3.582A	3.568	34.139A	2717	2717	1467.2A	452	313	926



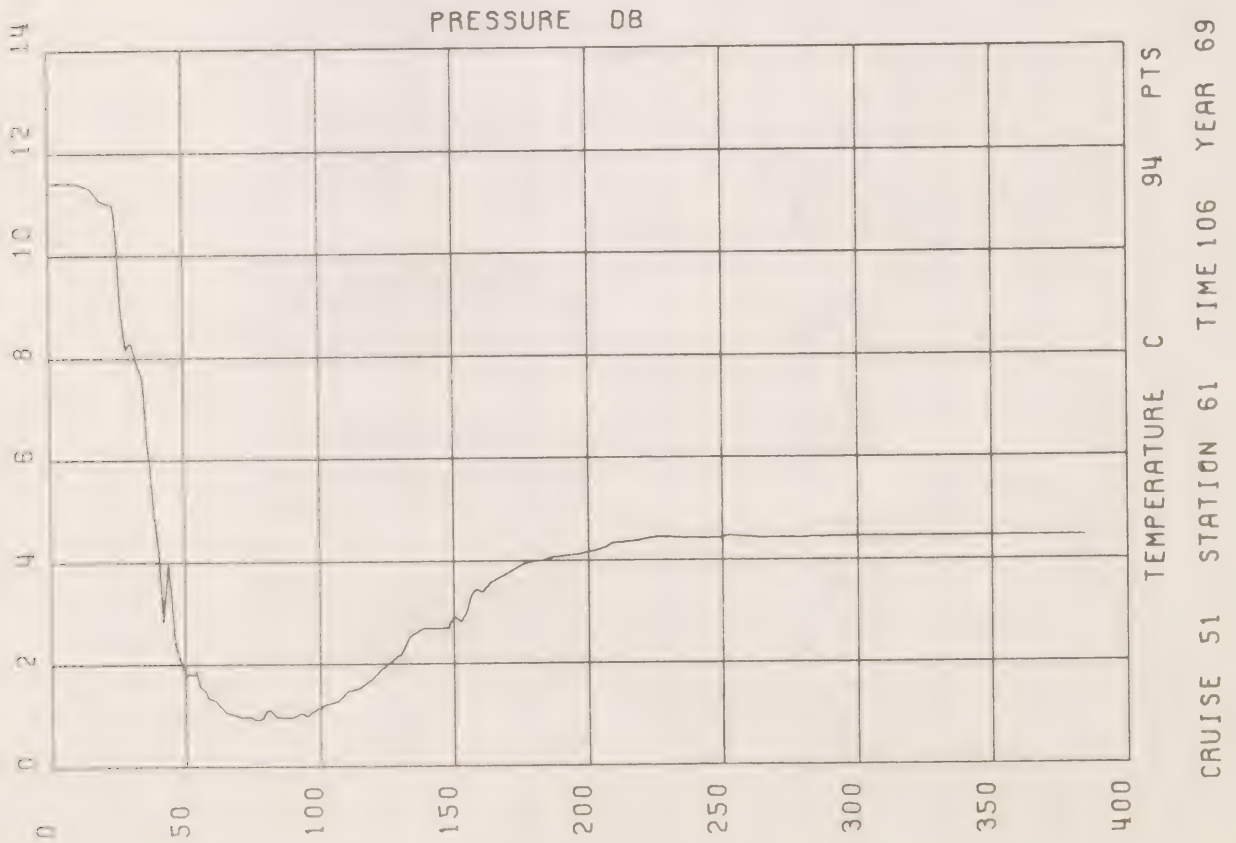
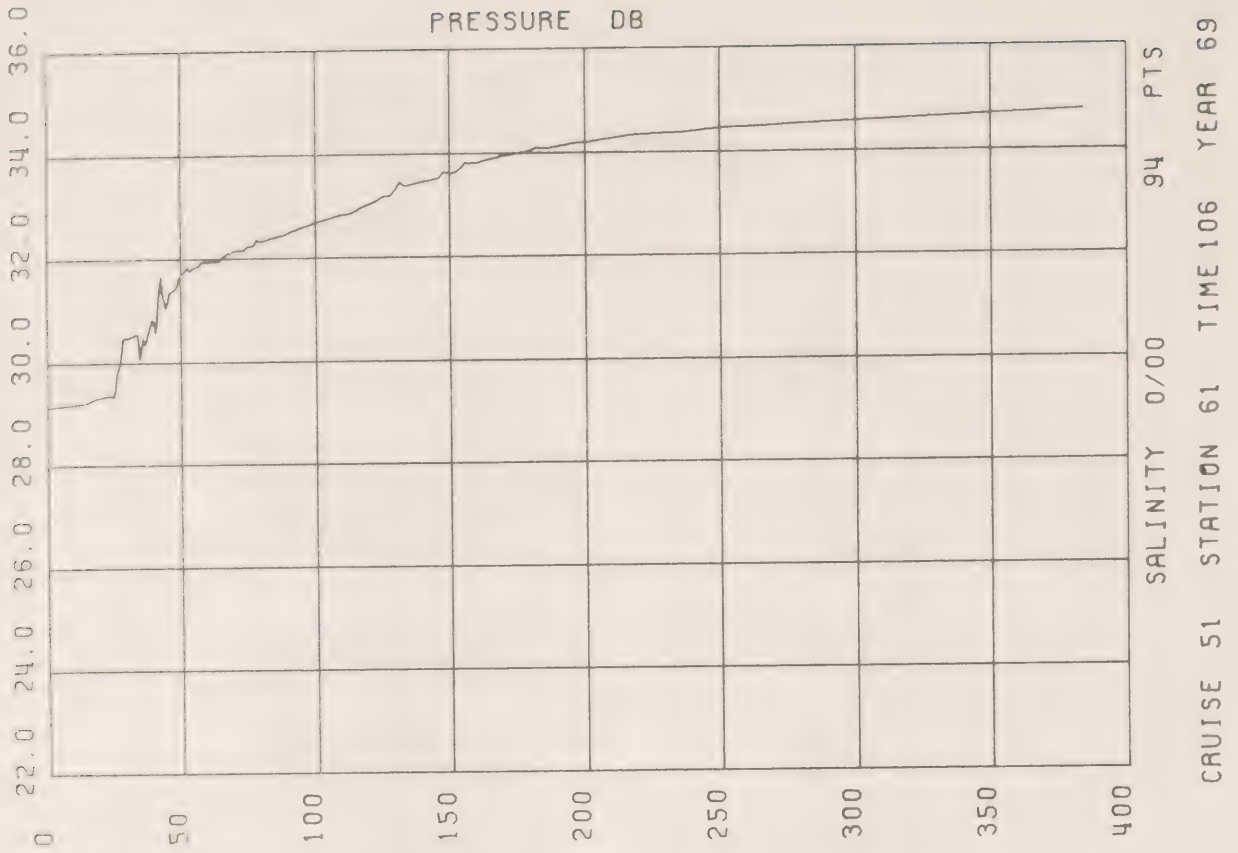
CRUISE NUMBER 69051 STATION NUMBER 060

LAT N48 40.00 YEAR 1969 WAVE-P/H WIND-DIR 020 WW 02
 LONG W 63 0.00 MONTH 9 SWEL-P/H WIND-SPD 22 CLD-A
 DEPTH 368.0 DAY 25 SWEL-D AIR-TEM 9.8
 MAPSD SQ H/M 2346 BARO 1013.2 WET-BLB 8.8

COUN 18
 INST 1C
 RESTR
 UNAS 08G

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.600W	11.599	29.111A	2212	2212	1488.8W	55	3	5715
	20.0	20.2A	11.593W	11.595	29.124A	2213	2213	1489.0A	114	12	5707
	30.0	30.2A	9.572B	9.569	29.684B	2290	2290	1482.5A	165	26	4973
	50.0	50.4A	2.096C	2.094	31.793C	2542	2542	1455.1A	239	54	2562
	75.0	75.5A	0.898W	0.887	32.173B	2581	2581	1450.7W	300	93	2202
	100.0	100.7A	0.782C	0.778	32.495B	2607	2607	1451.1A	352	140	1960
	125.0	125.9A	1.930A	1.924	33.147A	2652	2652	1457.5A	396	190	1528
	150.0	151.0A	2.762C	2.753	33.622C	2682	2682	1462.1A	431	239	1236
	175.0	176.2A	3.800A	3.788	33.942A	2699	2699	1467.5A	460	288	1092
	200.0	201.4A	3.714B	3.700	34.053A	2708	2708	1467.6W	486	339	1001
	225.0	226.6A	3.680A	3.665	34.195A	2720	2720	1468.1A	511	391	895
	250.0	251.8A	4.085A	4.067	34.422A	2734	2734	1470.6A	532	443	769
	300.0	302.2A	4.393A	4.370	34.603A	2745	2745	1472.9A	568	547	671



CRUISE NUMBER 69051 STATION NUMBER 061

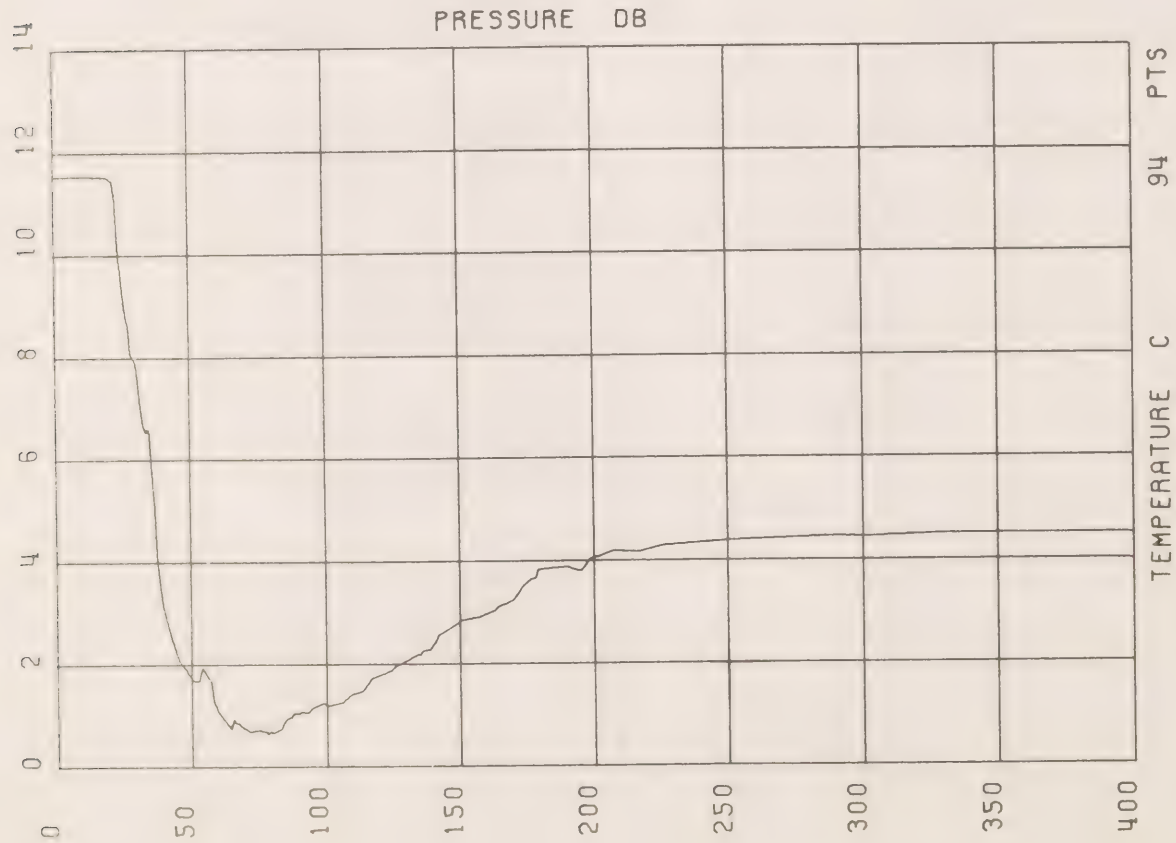
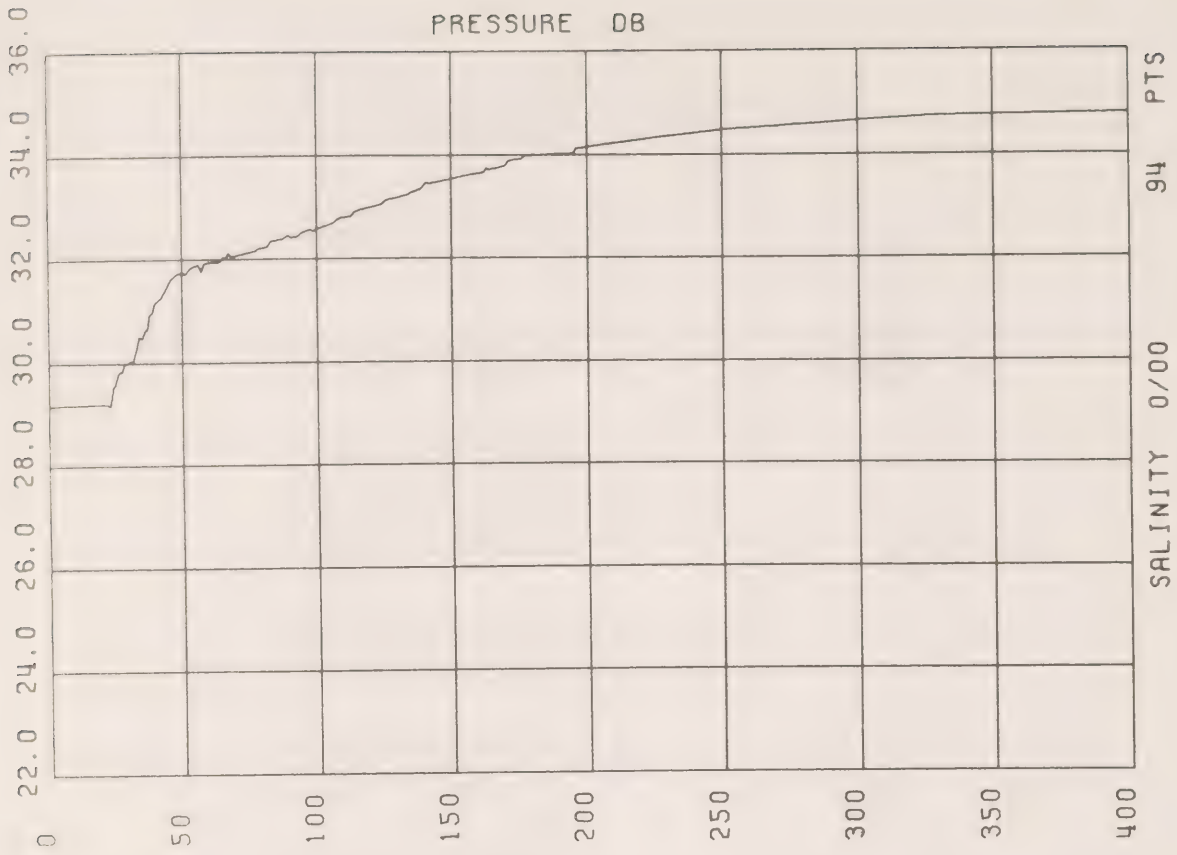
LAT	N48	40.00	YEAR	1969	WAVE-P/H	WIND-DIP	COUN	18
LONG	W 62	45.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	1 C
DEPTH		440.0	DAY	26	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	0109	BARO	WET-BLB	UNAS	08H

COUN	18
INST	1 C
RESTR	
UNAS	08H

WW	CLD-A
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INTERPOLATED

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.414C	11.413	29.185A	2221	2221	1488.3W	53	3	5630
	20.0	20.2A	11.046B	11.044	29.329A	2239	2239	1487.3A	109	12	5465
	30.0	30.2A	8.270W	8.267	30.467A	2370	2370	1478.6A	158	24	4206
	50.0	50.4A	1.831D	1.829	31.695C	2536	2536	1453.8A	229	52	2622
	75.0	75.5A	0.907W	0.904	32.230C	2585	2585	1450.7A	288	90	2158
	100.0	100.7A	1.168B	1.164	32.688A	2620	2620	1453.0A	338	135	1825
	125.0	125.9A	1.988A	1.982	33.185A	2654	2654	1457.7A	380	184	1504
	150.0	151.0A	2.857A	2.848	33.588A	2679	2679	1462.6A	415	232	1271
	175.0	176.2A	3.933W	3.921	33.999A	2701	2701	1468.1A	444	280	1065
	200.0	201.4A	4.170W	4.155	34.190A	2715	2715	1469.8A	469	329	946
	225.0	226.6A	4.461A	4.444	34.357A	2725	2725	1471.6A	491	378	856
	250.0	251.8	4.470	4.451	34.456	2733	2733	1472.2	512	428	784
	300.0	302.2A	4.450W	4.427	34.578A	2742	2743	1473.1A	549	532	696

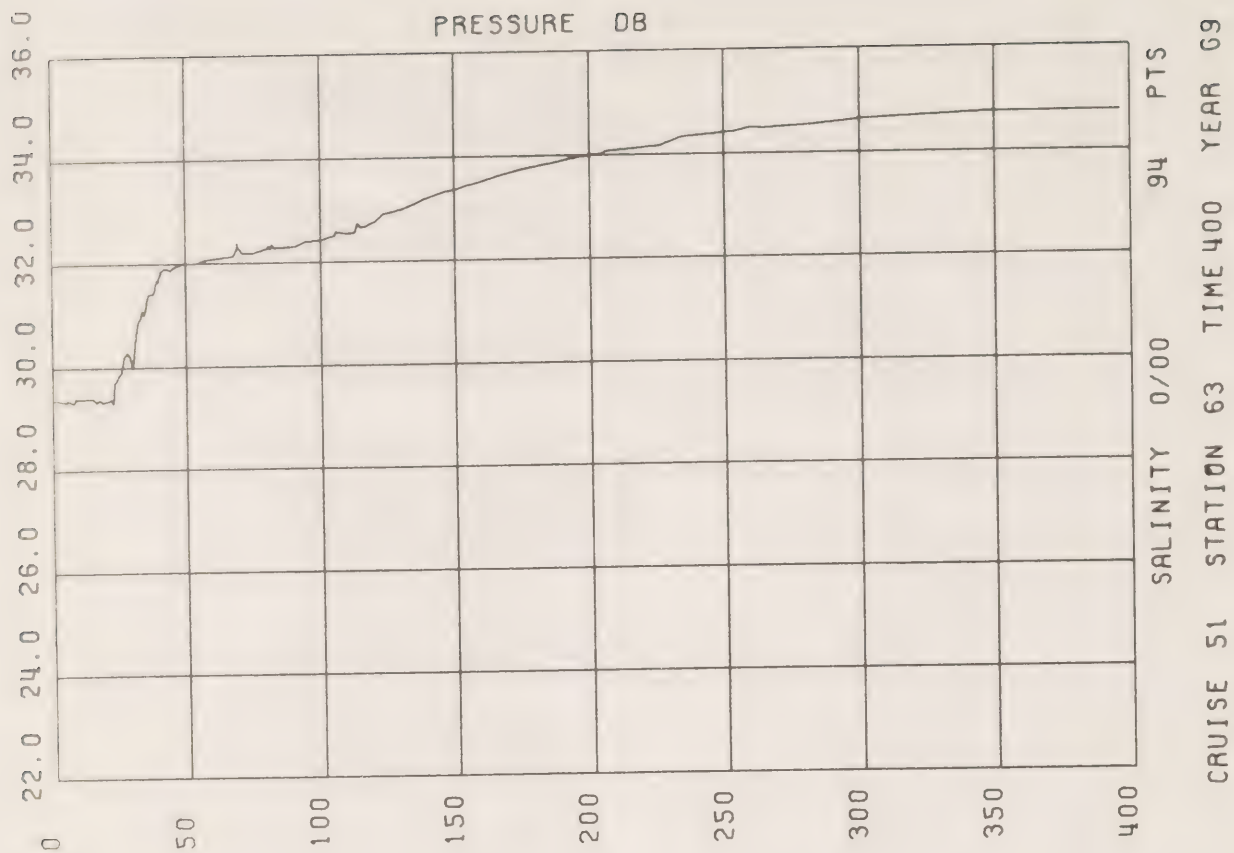


CRUISE NUMBER 69051 STATION NUMBER 062

LAT	N48	40.00	YEAR	1969	WAVE-P/H	WIND-DIR	030	WW	00	COUN	18
LONG	W 62	30.00	MONTH	9	SWEL-P/H	WIND-SPD	24	CLD-A	8	INST	10
DEPTH		408.0	DAY	26	SWEL-D	AIR-TEM	9.0			RESTR	
MARSD	SQ		H/M	0230	BARO	1014.0	WET-BLB	8.0		UNAS	081

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.539W	11.538	29.188A	2219	2219	1488.7W	56	2	5650
	20.0	20.2A	11.525D	11.523	29.190A	2220	2220	1488.9A	113	11	5647
	30.0	30.2A	7.858R	7.855	30.033A	2343	2343	1476.4A	164	25	4472
	50.0	50.4A	1.681A	1.679	31.742B	2541	2541	1453.3A	230	51	2576
	75.0	75.5A	0.712W	0.709	32.131A	2578	2578	1449.8W	289	80	2223
	100.0	100.7A	1.171A	1.167	32.598B	2612	2612	1452.9A	341	136	1902
	125.0	125.9	1.940	1.934	33.120	2649	2649	1457.5	385	185	1549
	150.0	151.0A	2.845A	2.836	33.544A	2676	2676	1462.4A	420	236	1303
	175.0	176.2A	3.598B	3.586	33.916A	2699	2699	1466.6A	450	286	1090
	200.0	201.4A	4.066A	4.052	34.151A	2713	2713	1469.3A	477	335	965
	225.0	226.6A	4.285A	4.268	34.334A	2725	2725	1470.8A	500	386	853
	250.0	251.8A	4.380A	4.361	34.481A	2736	2736	1471.9A	519	435	756
	300.0	302.2A	4.440A	4.417	34.650A	2748	2748	1473.2A	555	535	641
	400.0	403.0W	4.500W	4.469	34.775W	2757	2758	1475.3W	614	746	565

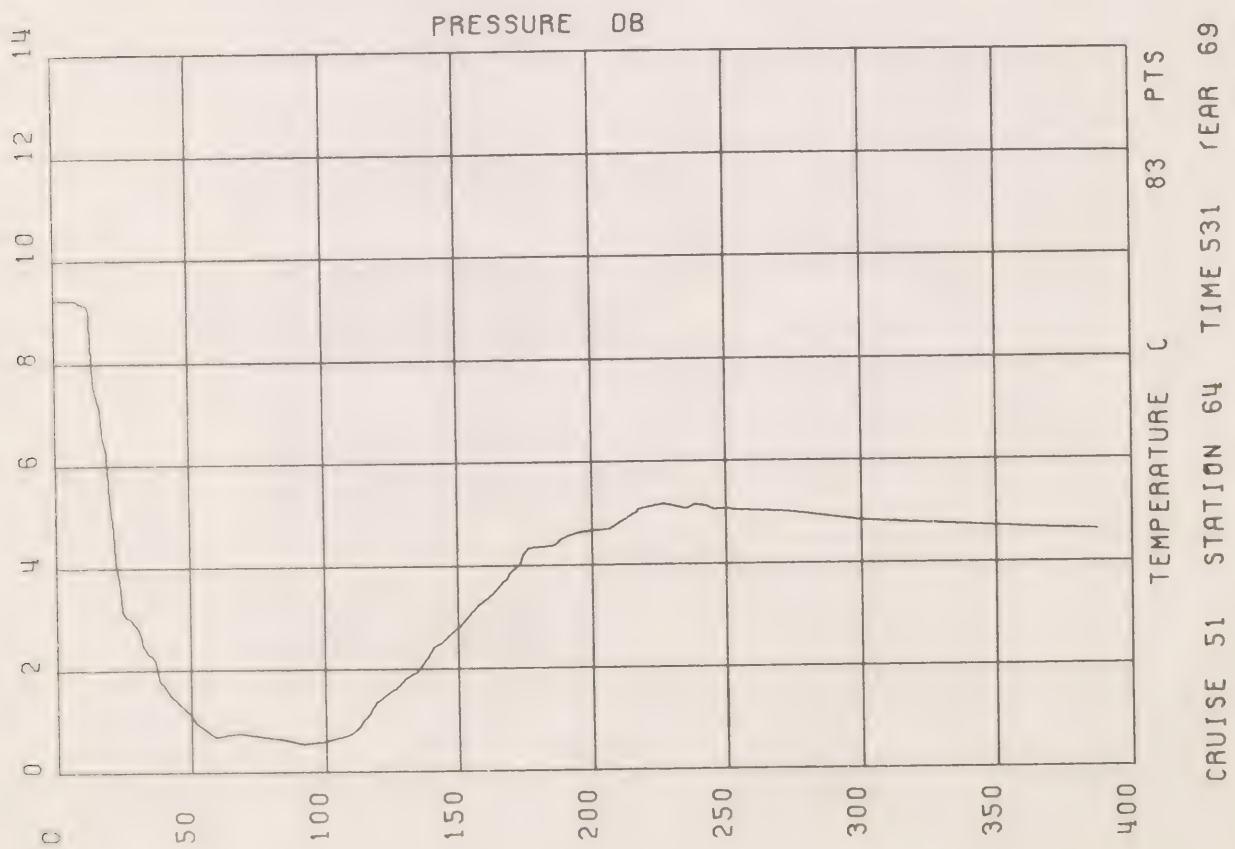
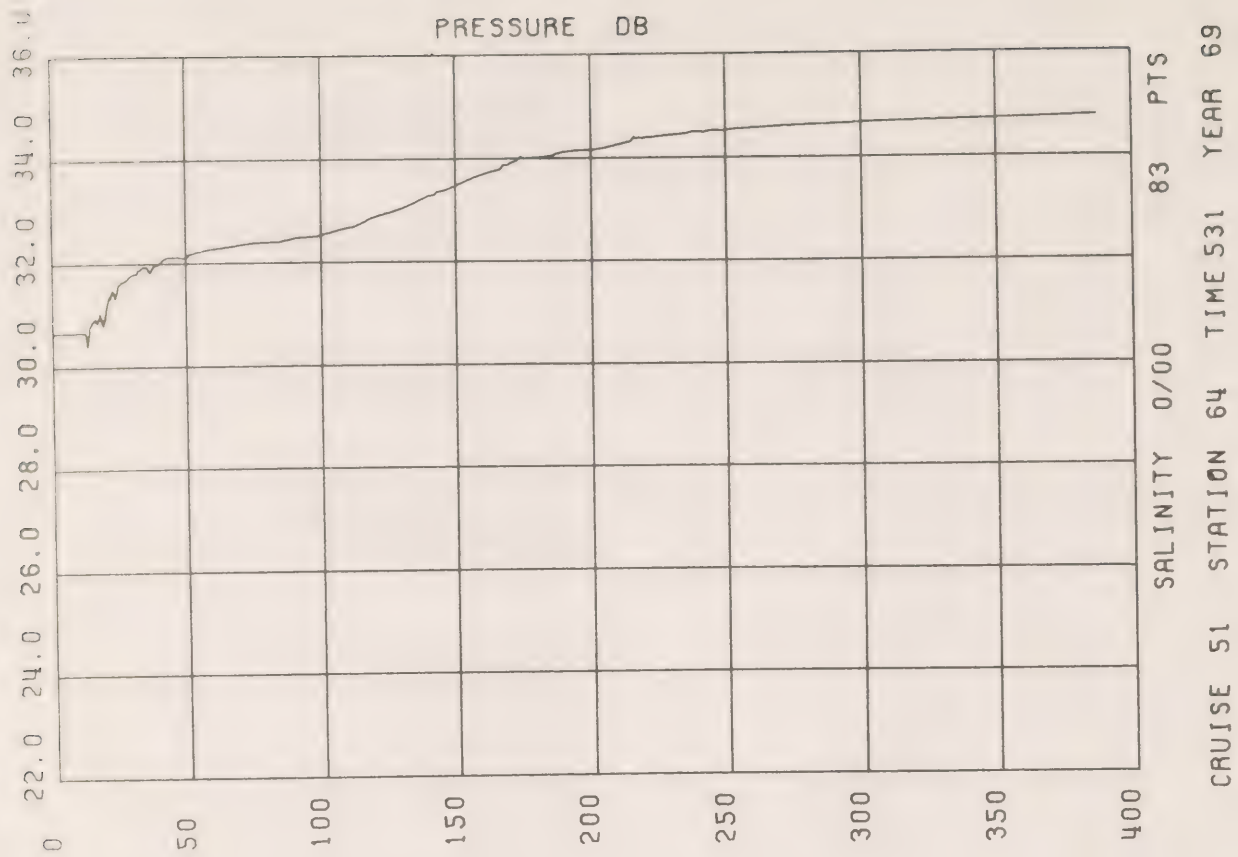


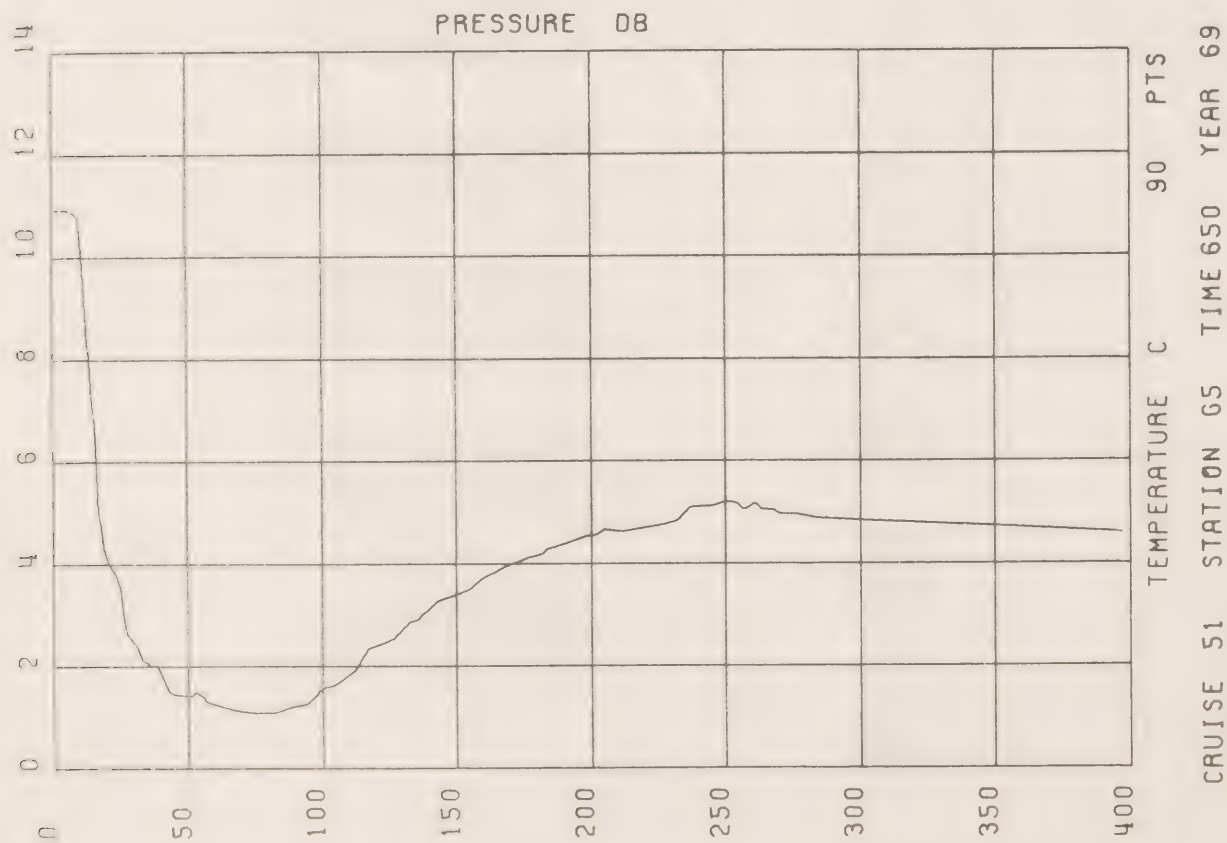
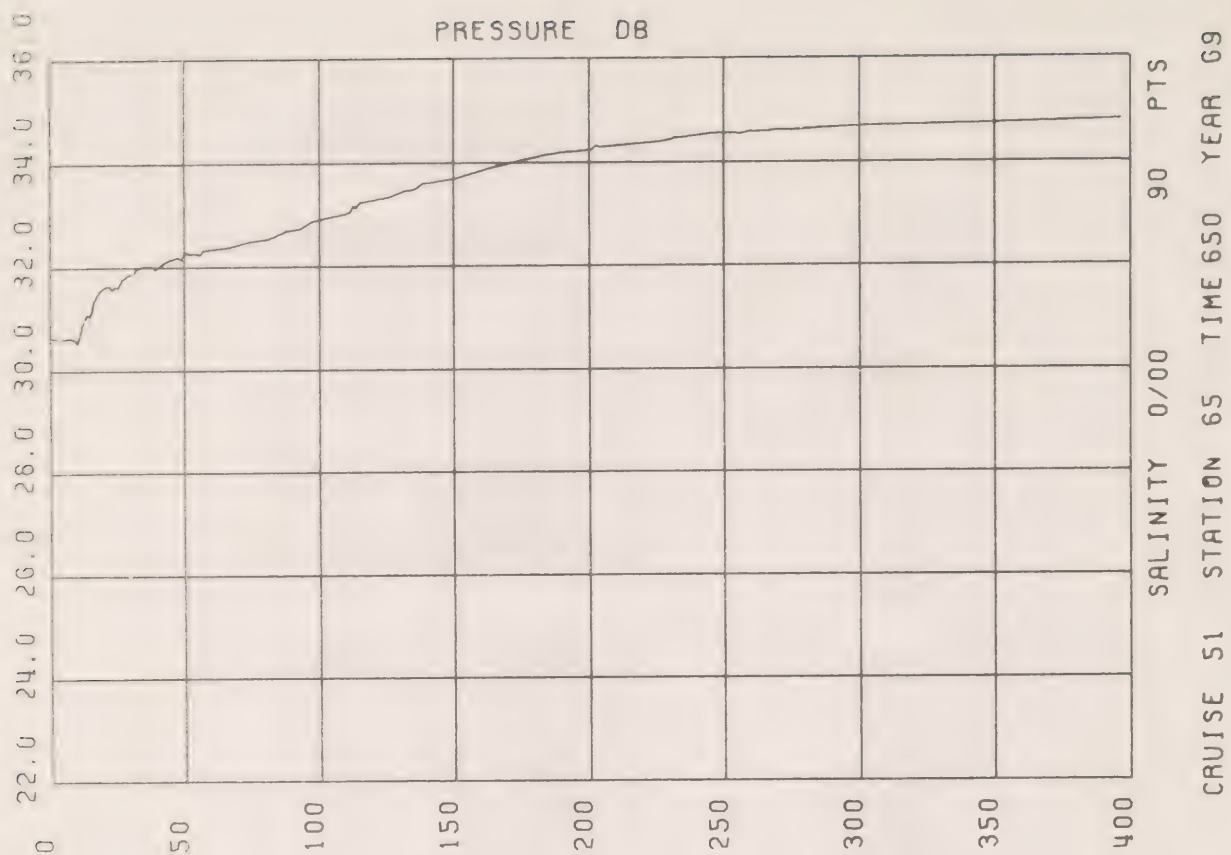
CRUISE NUMBER 69051 STATION NUMBER 063

LAT	N48	40.00	YEAR	1969	WAVE-P/H	0405	WIND-DIR	030	WW	00	COUN	18
LONG	W 62	15.00	MONTH	9	SWEL-P/H	0504	WIND-SPD	24	CLD-A	8	INST	10
DEPTH		402.0	DAY	26	SWEL-D	030	AIR-TEM	9.4			RESTR	
MARSD	SQ		H/M	0403	BARO	1014.0	WET-BLB	8.3			UNAS	08J

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	10.931C	10.930	29.401A	2246	2246	1486.8W	51	3	5391
	20.0	20.2A	10.960W	10.966	29.327W	2240	2240	1486.9A	105	11	5455
	30.0	30.2A	7.497D	7.494	30.062W	2348	2348	1475.0A	154	23	4416
	50.0	50.4A	1.073A	1.071	32.007A	2566	2566	1450.9A	211	46	2337
	75.0	75.5A	0.509W	0.506	32.175A	2582	2582	1448.9A	267	83	2178
	100.0	100.7	0.930	0.926	32.433	2601	2601	1451.6	320	130	2004
	125.0	125.9	1.450	1.444	32.935	2638	2638	1455.0	367	184	1655
	150.0	151.0A	2.557A	2.543	33.372A	2665	2665	1461.0A	405	238	1408
	175.0	176.2A	3.249A	3.238	33.749A	2689	2689	1464.9A	438	291	1185
	200.0	201.4A	3.776A	3.762	34.006B	2704	2704	1467.8A	465	346	1044
	225.0	226.6	4.190	4.174	34.164	2712	2713	1470.2	491	401	970
	250.0	251.8A	4.439W	4.420	34.413A	2729	2730	1472.0W	513	454	813
	300.0	302.2A	4.742A	4.718	34.636A	2744	2744	1474.4A	550	561	685



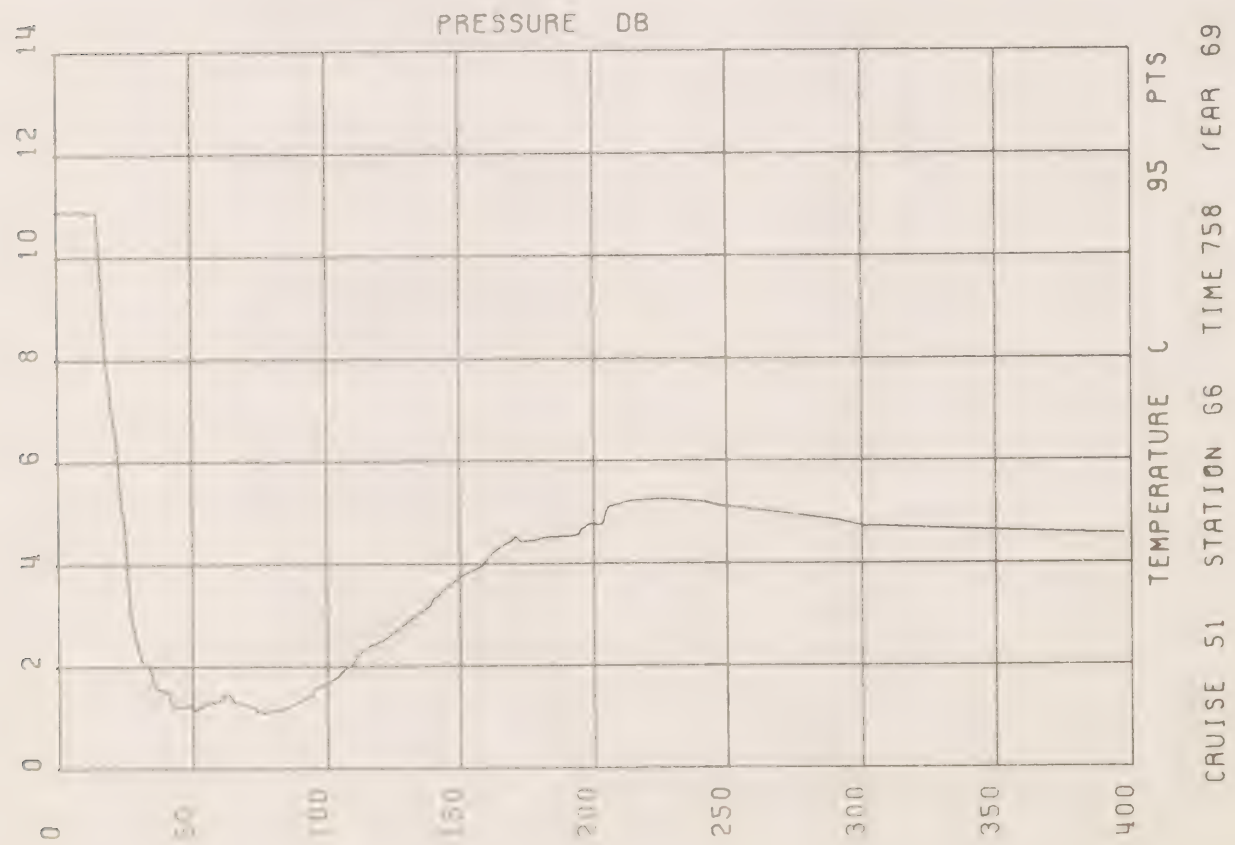
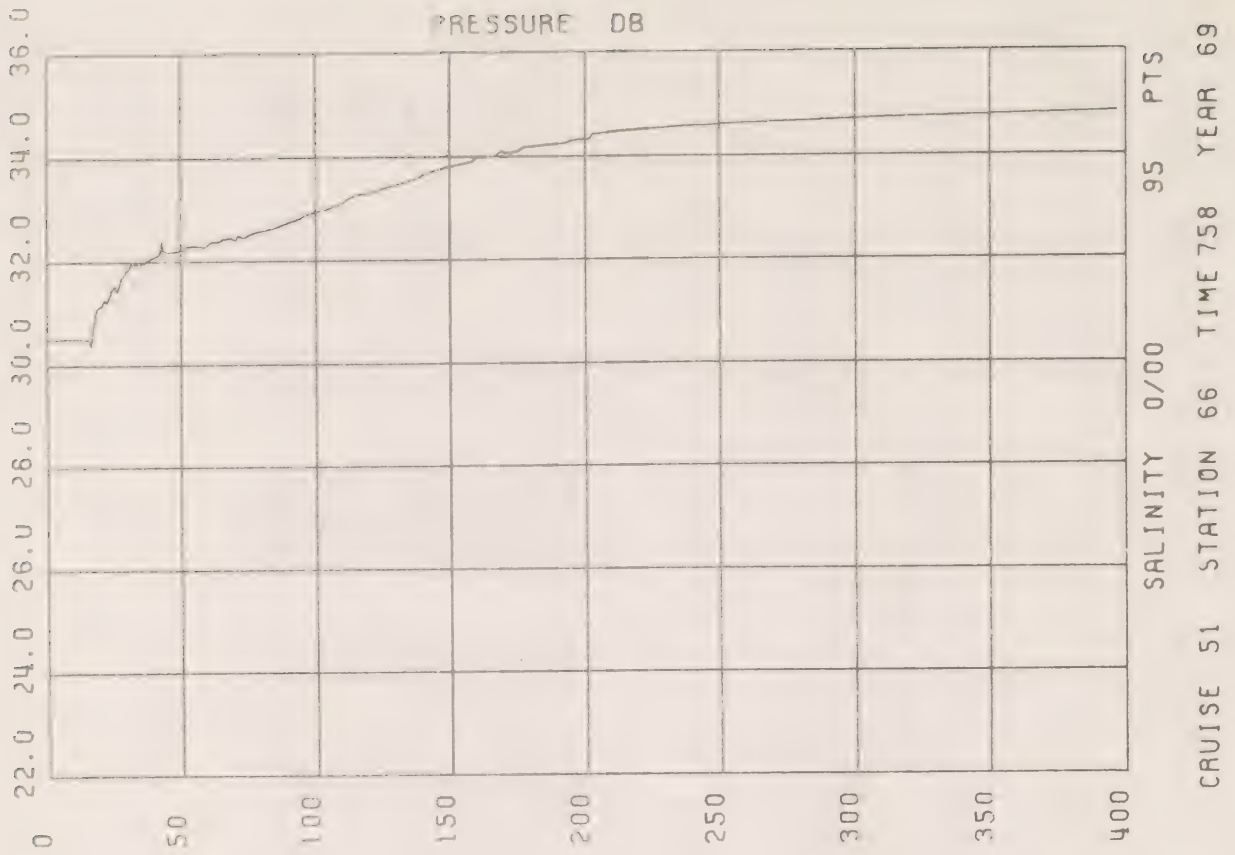


LAT N48 40.00
 LONG W 61 45.00
 DEPTH 406.0
 MARS SQ
 YEAR 1969
 MONTH 9
 DAY 26
 H/M 0350
 CRUISE NUMBER 69051
 STATION NUMBER 065
 WAVE-P/H 0506
 SWEL-P/H 0605
 SWEL-D 020
 BARO 1014.3
 WIND-DIR 030
 WIND-SPD 25
 AIR-TEM 10.0
 WET-BLB 9.4
 WW 02
 CLD-A 8

COUN 18
 INST 10
 RESTR
 UNAS 08L

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	10.248C	10.247	30.525C	2343	2343	1485.7A	42	2	4469
	20.0	20.2	4.000	3.999	31.631	2513	2513	1462.7	77	8	2840
	30.0	30.2A	2.418B	2.416	31.875A	2547	2547	1456.3A	104	14	2525
	50.0	50.4A	1.396C	1.394	32.271C	2585	2585	1452.7W	151	34	2155
	75.0	75.5A	1.080W	1.077	32.497A	2606	2606	1451.9W	203	67	1964
	100.0	100.7A	1.570B	1.565	32.907A	2635	2635	1455.2A	250	109	1685
	125.0	125.9A	2.496A	2.489	33.327A	2662	2662	1460.2A	289	154	1435
	150.0	151.0A	3.408A	3.398	33.689A	2683	2683	1465.1A	322	200	1244
	175.0	176.2	4.110	4.097	34.048	2704	2704	1468.9	350	248	1045
	200.0	201.4A	4.544A	4.529	34.242A	2714	2715	1471.4A	375	295	947
	225.0	226.6A	4.745A	4.728	34.397A	2725	2725	1472.8A	398	345	856
	250.0	251.8A	5.199A	5.178	34.559A	2732	2733	1475.4W	418	394	789
	300.0	302.2A	4.830A	4.806	34.685A	2747	2747	1474.8A	454	496	659

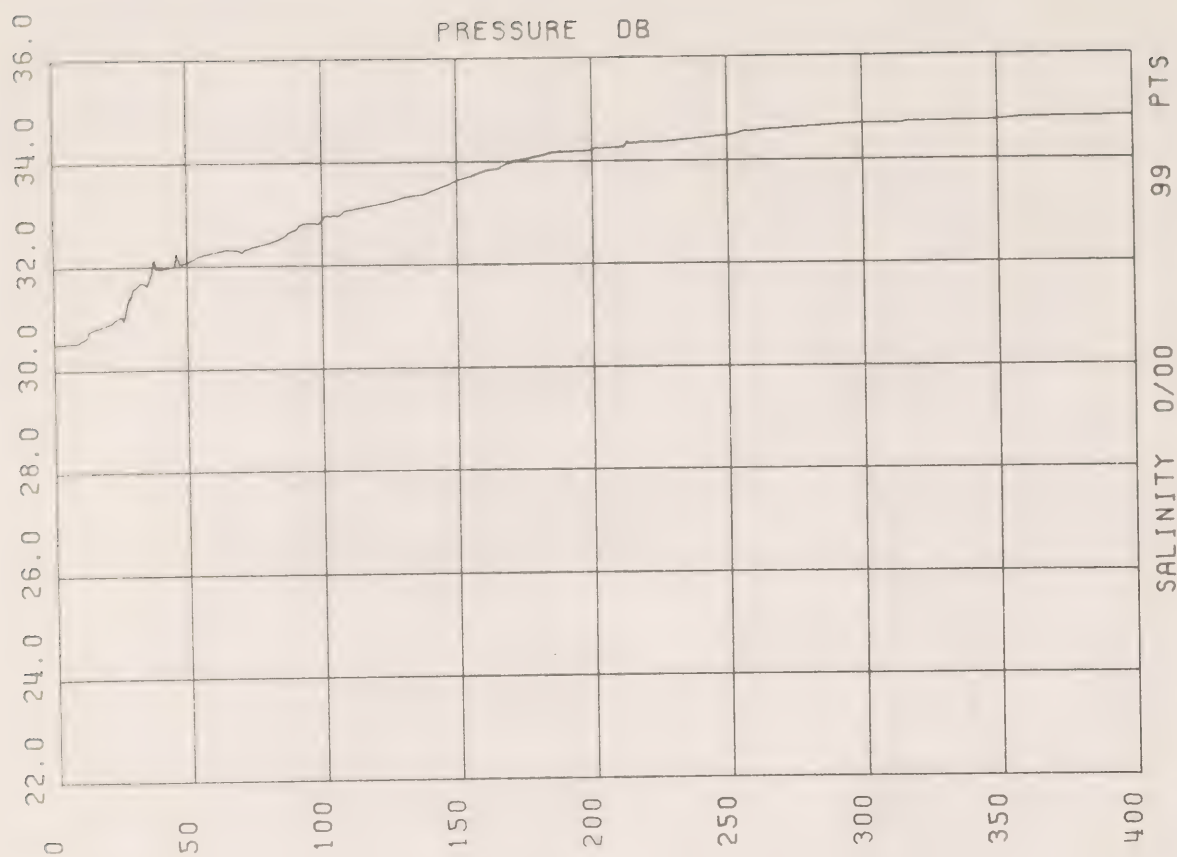


CRUISE NUMBER 69051 STATION NUMBER 066

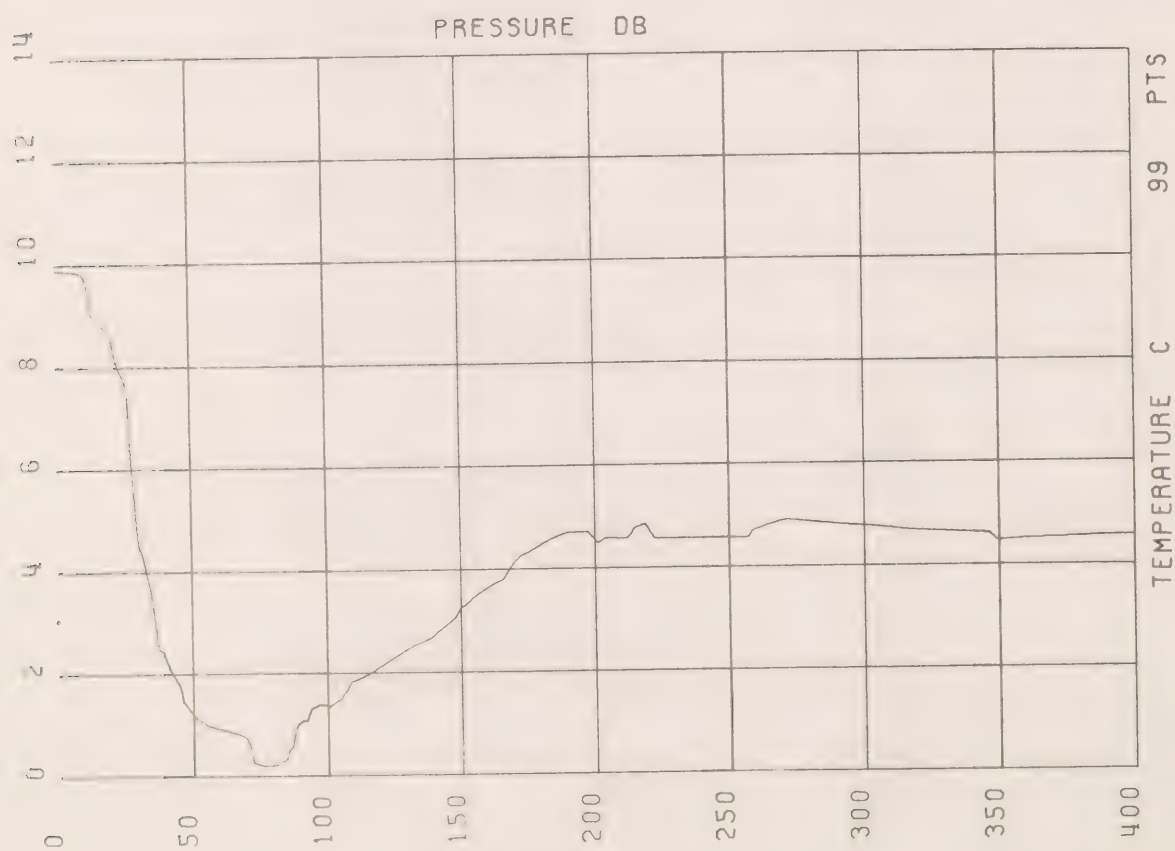
LAT	N48	30.00	YEAR	1969	WAVE-P/H	WIND-DIR	WW	COUN	18
LONG	W 61	45.00	MONTH	9	SWEL-P/H	WIND-SPD	CLD-A	INST	10
DEPTH		440.0	DAY	26	SWEL-D	AIR-TEM		RESTR	
MARSD	SQ		H/M	0800	BARO	WET-BLB		UNAS	09L

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	0.0	0.1	10.880	10.880	30.505	2333	2333	1487.9	0	0	4563
	10.0	10.1A	10.880W	10.879	30.515B	2333	2333	1488.0A	46	2	4558
	20.0	20.2	7.090	7.088	31.140	2439	2439	1474.7	89	9	3545
	30.0	30.2A	2.353A	2.351	31.854A	2545	2545	1456.0A	119	17	2538
	50.0	50.4A	1.187D	1.186	32.194C	2580	2580	1451.7A	165	36	2201
	75.0	75.5A	1.121W	1.118	32.519A	2606	2607	1452.2W	218	69	1951
	100.0	100.7A	1.645A	1.639	32.952A	2639	2639	1455.5A	263	110	1655
	125.0	125.9A	2.650A	2.643	33.400A	2666	2666	1461.0A	301	154	1393
	150.0	151.0A	3.755W	3.745	33.812A	2689	2689	1466.7W	334	199	1184
	175.0	176.2A	4.439A	4.426	34.111A	2705	2706	1470.4W	361	246	1031
	200.0	201.4	4.720	4.705	34.310	2718	2718	1472.2	386	292	915
	225.0	226.6A	5.250A	5.232	34.525A	2729	2729	1475.1A	407	339	818
	250.0	251.8A	5.098A	5.078	34.600A	2737	2737	1475.0A	427	387	748
	300.0	302.2A	4.718A	4.694	34.693A	2749	2749	1474.4A	462	486	640



	SALINITY	0/00	99	PTS
CRUISE 51	STATION 67	TIME 813	YEAR 69	



	TEMPERATURE	C	99	PTS
CRUISE 51	STATION 67	TIME 813	YEAR 69	

CRUISE NUMBER 69051 STATION NUMBER 067

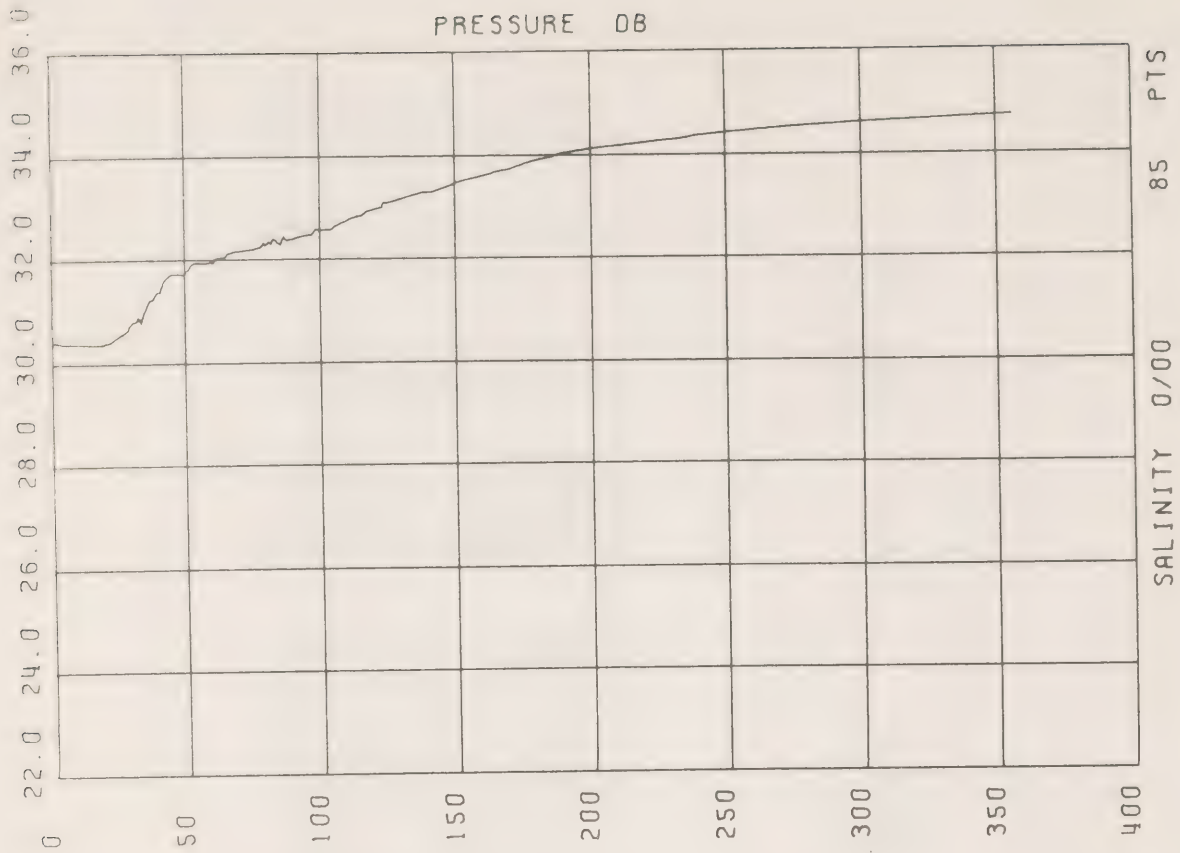
LAT	N48	30.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 62	0.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		443.0	DAY	26	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	0905	BARO	WET-BLB	UNAS	09K

WV
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	9.800A	9.799	30.553A	2355	2355	1484.2W	43	2	4358
	20.0	20.2A	8.624B	8.622	30.877A	2397	2397	1480.3A	84	9	3947
	30.0	30.2A	4.457D	4.455	31.581B	2505	2505	1464.7A	120	18	2922
	50.0	50.4A	1.132A	1.130	32.060A	2570	2570	1451.2A	171	38	2301
	75.0	75.5A	0.188A	0.185	32.384A	2601	2601	1447.8A	224	72	2003
	100.0	120.7A	1.354A	1.349	32.893A	2635	2635	1454.1A	270	114	1681
	125.0	125.9A	2.317A	2.310	33.230A	2655	2655	1459.2A	310	159	1495
	150.0	151.0	3.270	3.260	33.646	2680	2680	1464.4	345	209	1263
	175.0	176.2A	4.331C	4.318	34.048A	2702	2702	1469.9A	374	257	1067
	200.0	201.4A	4.492A	4.477	34.250A	2716	2716	1471.2A	400	307	935
	225.0	226.6A	4.538D	4.520	34.353A	2723	2724	1472.0A	423	357	864
	250.0	251.8A	4.560A	4.541	34.487A	2734	2734	1472.6A	444	408	771
	300.0	302.2A	4.768A	4.744	34.685W	2747	2748	1474.6W	479	507	652
	400.0	403.0W	4.577W	4.546	34.793W	2758	2758	1475.6W	539	720	560

PRESSURE DB

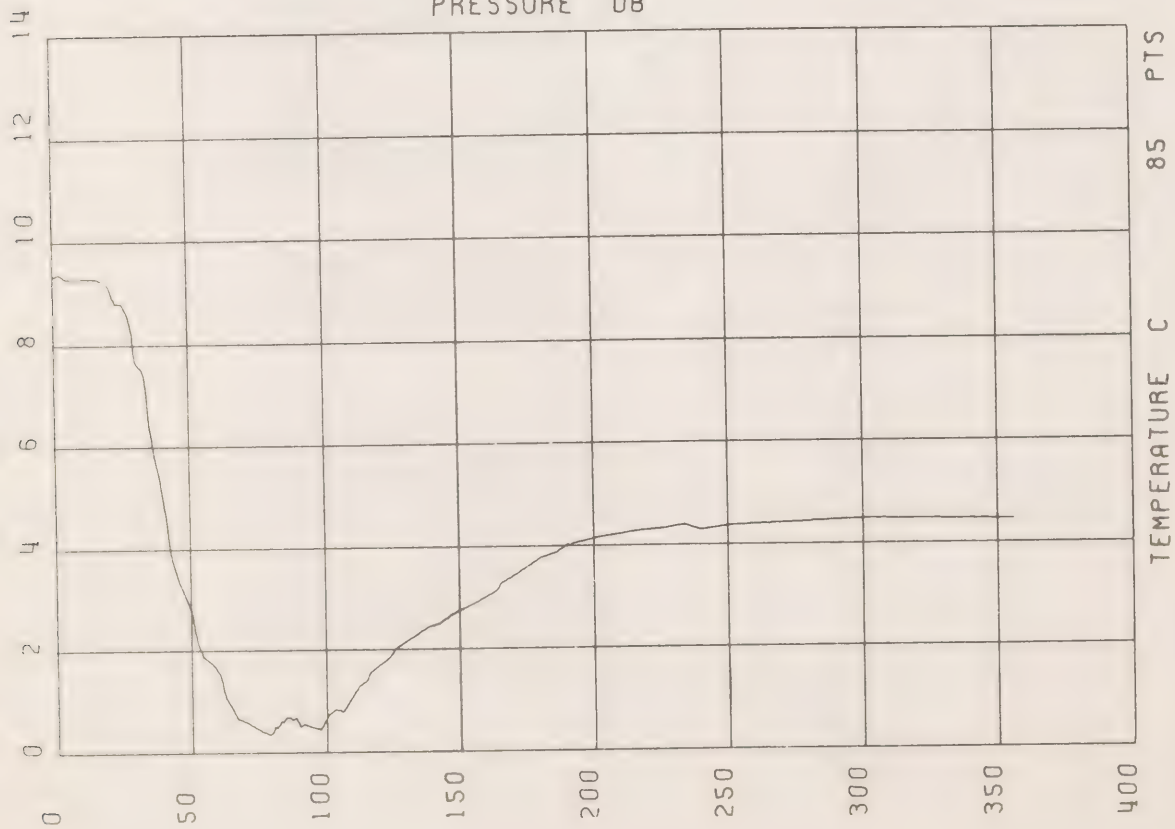


SALINITY 0/00

85 PTS

CRUISE 51 STATION 68 TIME 915 YEAR 69

PRESSURE DB



TEMPERATURE C

85 PTS

CRUISE 51 STATION 68 TIME 915 YEAR 69

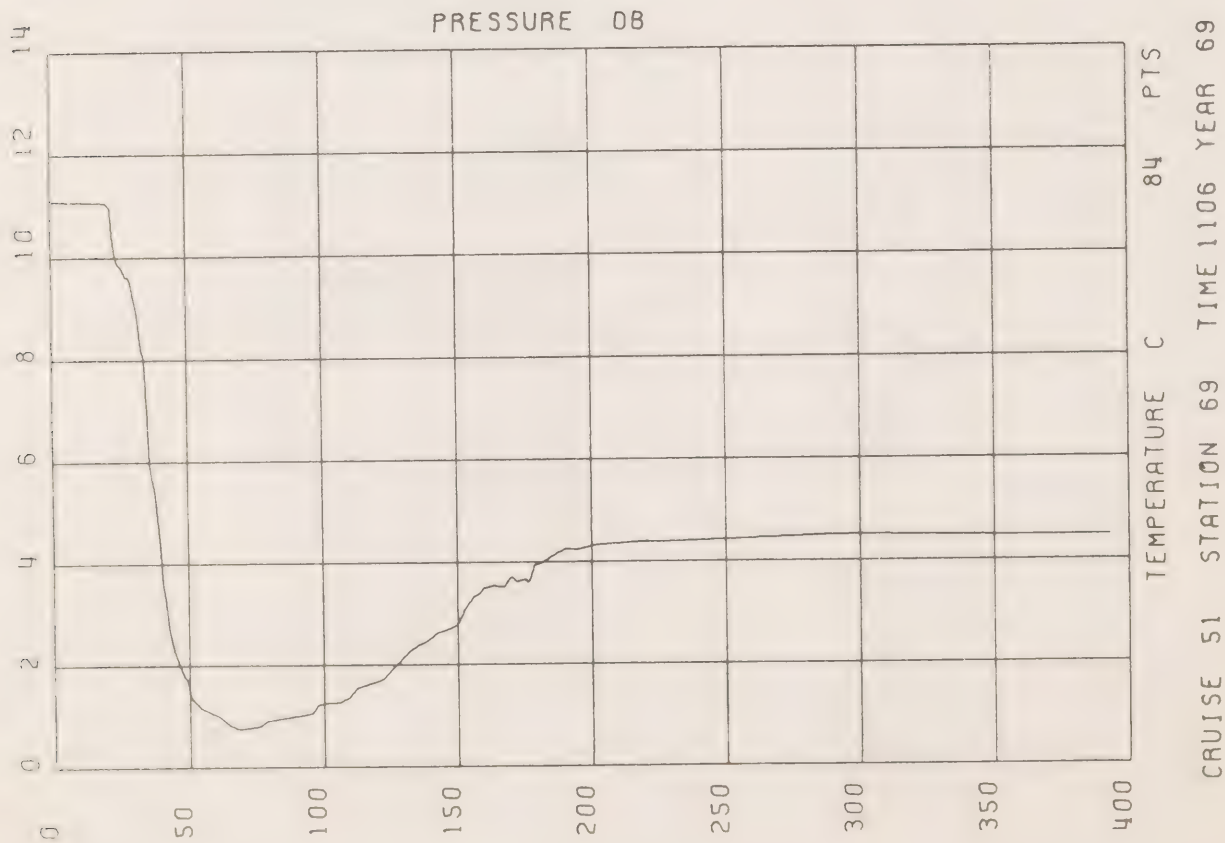
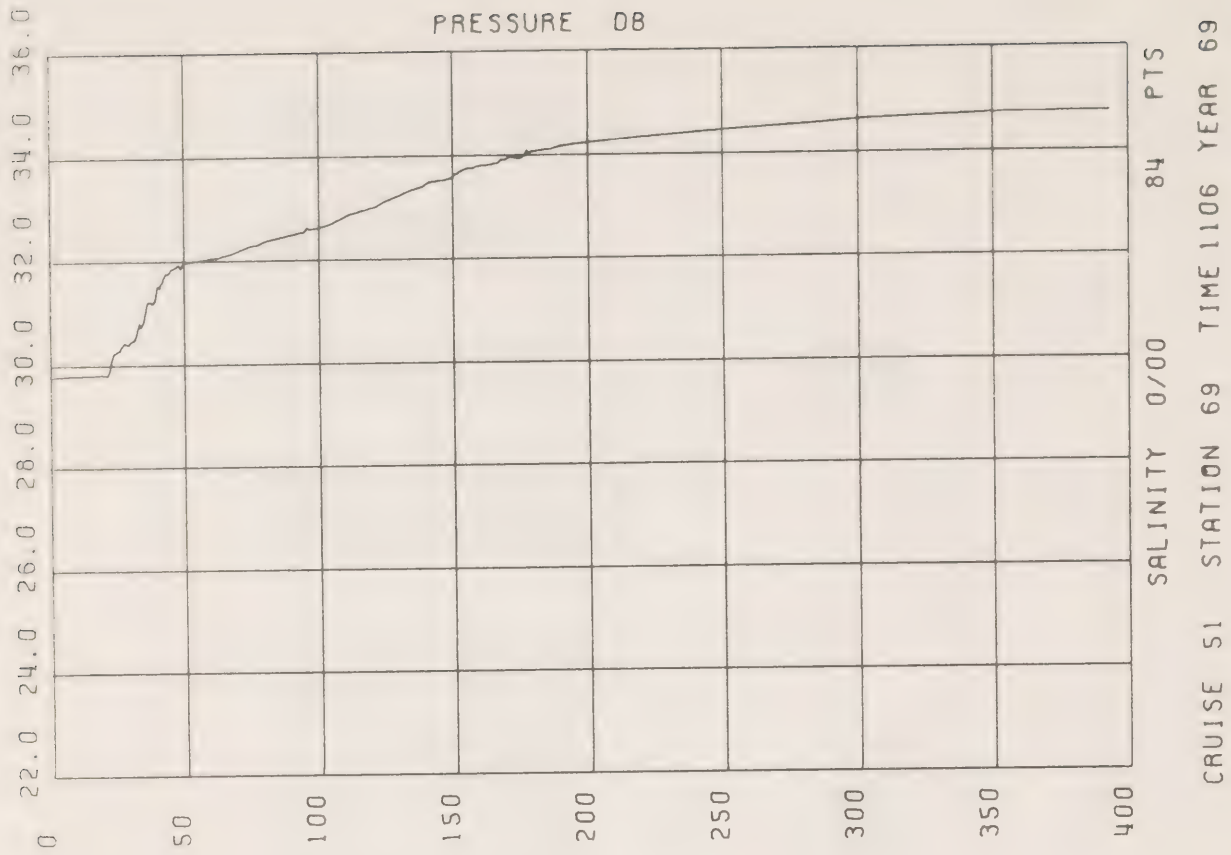
LAT N48 30.00
 LONG W 62 15.00
 DEPTH 424.0
 MARSD SQ
 YEAR 1969
 MONTH 9
 DAY 26
 H/M 1007
 WAVE-P/H
 SWEL-P/H
 SWEL-D
 BARO
 WIND-DIR
 WIND-SPD
 AIR-TEM
 WET-BLB
 W W
 CLD-A
 STATION NUMBER 068

CRUISE NUMBER 69051

COUN 18
 INST 10
 RESTR
 UNAS 09J

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	9.300W	9.299	30.382W	2349	2349	1482.0W	44	2	4411
	20.0	20.2A	9.139C	9.137	30.382A	2352	2352	1481.6A	88	9	4338
	30.0	30.2A	7.627D	7.624	30.790W	2405	2405	1476.5A	130	20	3869
	50.0	50.4A	2.657C	2.654	31.747A	2535	2535	1457.5A	194	45	2642
	75.0	75.5A	0.424A	0.421	32.204B	2585	2585	1448.6W	252	83	2152
	100.0	100.7A	0.758A	0.754	32.575A	2613	2613	1451.0W	303	128	1957
	125.0	125.9A	2.021A	2.015	33.114A	2648	2648	1457.8A	346	179	1561
	150.0	151.0A	2.774A	2.765	33.495A	2673	2673	1462.0A	383	230	1334
	175.0	176.2A	3.625A	3.613	33.848A	2693	2693	1466.6A	414	333	1146
	200.0	201.4A	4.142A	4.128	34.130A	2710	2710	1469.6A	441	385	900
	225.0	226.6A	4.319B	4.302	34.277A	2720	2720	1471.0A	465	437	792
	250.0	251.8A	4.373A	4.354	34.432A	2731	2732	1471.7A	487	540	672
	300.0	302.2A	4.491A	4.468	34.615A	2745	2745	1473.3A	523	760	585
	400.0	403.1W	4.470W	4.439	34.743W	2755	2756	1475.1W	584		

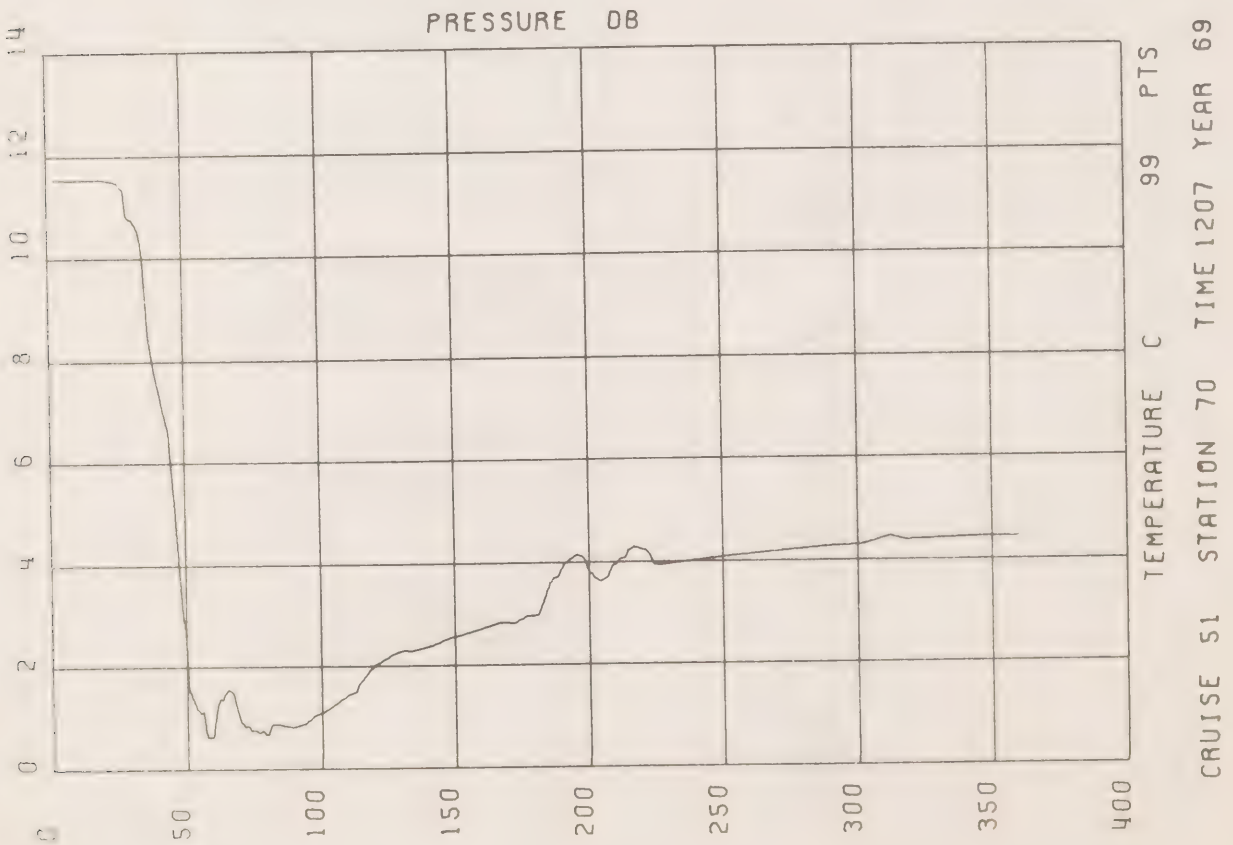
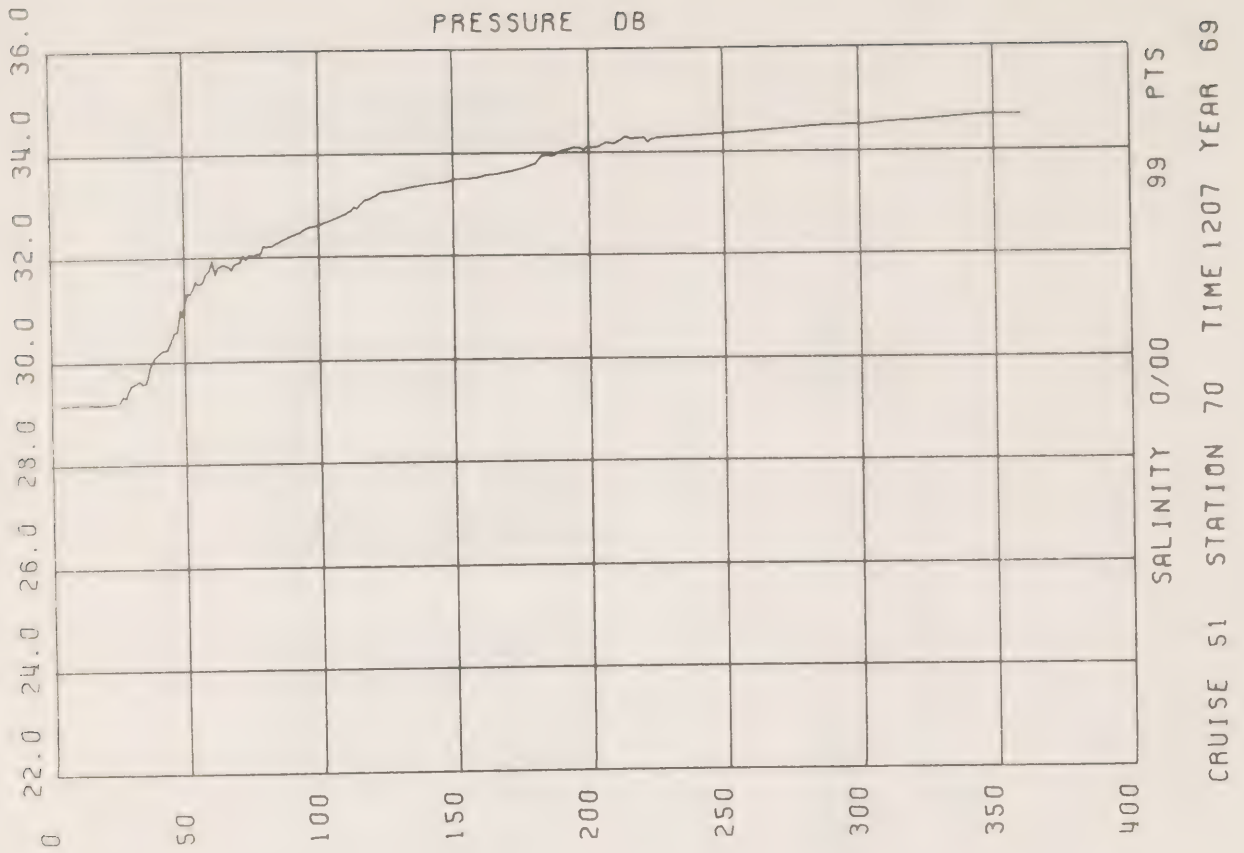


LAT N48 30.00
 LONG W 62 30.00
 DEPTH 400.0
 MARS SQ
 YEAR 1969
 MONTH 9
 DAY 26
 H/M 1108
 CRUISE NUMBER 69051
 STATION NUMBER 069
 WAVE-P/H 0706
 SWEL-P/H 040
 SWEL-D 1017.7
 BARO
 WIND-DIR 020
 WIND-SPD 25
 AIR-TEM 7.7
 WET-BLB 7.3
 WW 02
 CLD-A 8

COUN 18
 INST 10
 RESTR
 UNAS 091

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.089A	11.088	29.789A	2273	2273	1487.9W	51	2	5129
	20.0	20.2A	11.068E	11.065	29.798B	2275	2275	1488.0A	102	10	5118
	30.0	30.2A	9.154C	9.151	30.420C	2354	2354	1481.9A	149	23	4366
	50.0	50.4A	1.333A	1.331	31.978A	2562	2562	1452.0A	212	48	2375
	75.0	75.5A	0.784A	0.781	32.290A	2590	2590	1450.3A	269	84	2105
	100.0	100.7A	1.242A	1.238	32.617A	2614	2614	1453.2A	319	129	1883
	125.0	125.9A	1.926A	1.920	33.133A	2650	2650	1457.4A	361	178	1539
	150.0	151.0A	2.867A	2.858	33.633A	2683	2683	1462.6A	397	227	1239
	175.0	176.2A	3.558A	3.546	33.948A	2702	2702	1466.4A	425	275	1064
	200.0	201.4A	4.306A	4.291	34.232A	2717	2717	1470.4W	451	323	929
	225.0	226.6	4.370	4.353	34.345	2725	2725	1471.2	473	372	854
	250.0	251.8A	4.410W	4.391	34.451A	2733	2733	1471.9A	493	422	781
	300.0	302.2A	4.490W	4.467	34.633A	2746	2747	1473.3A	530	525	659

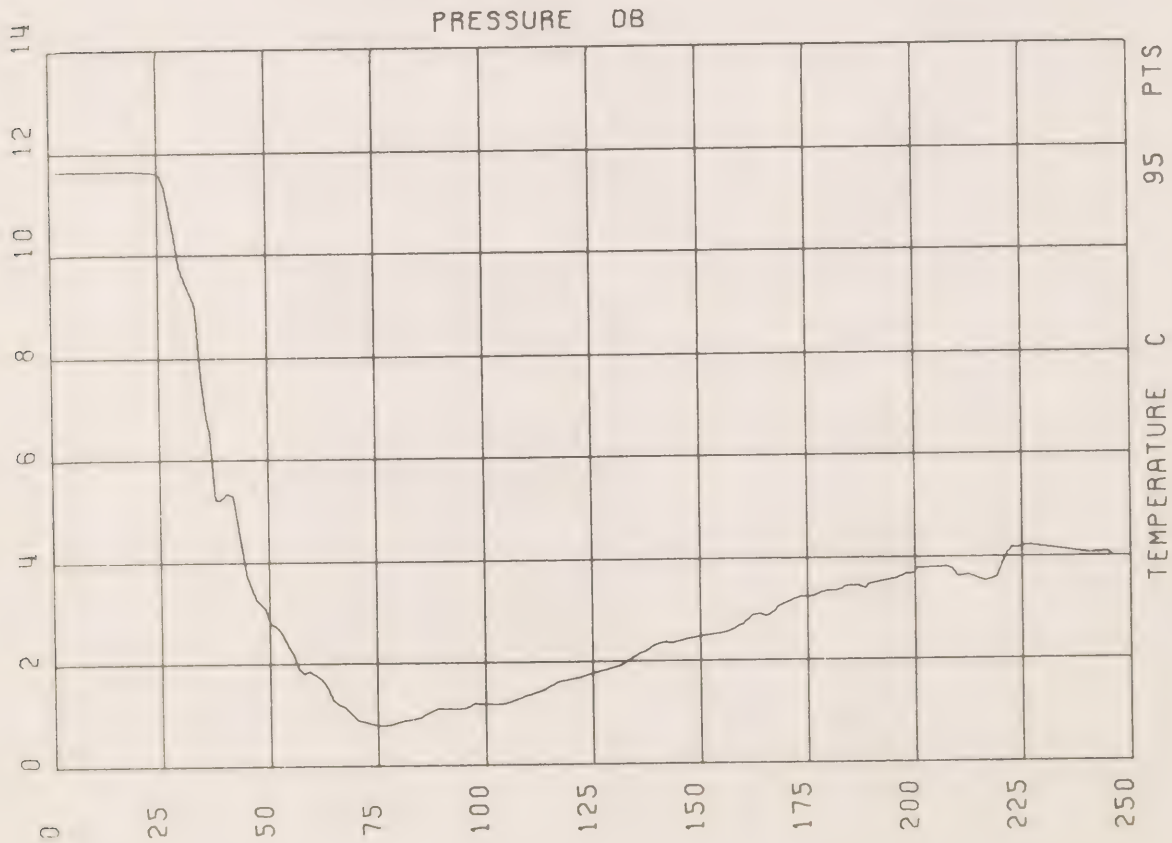
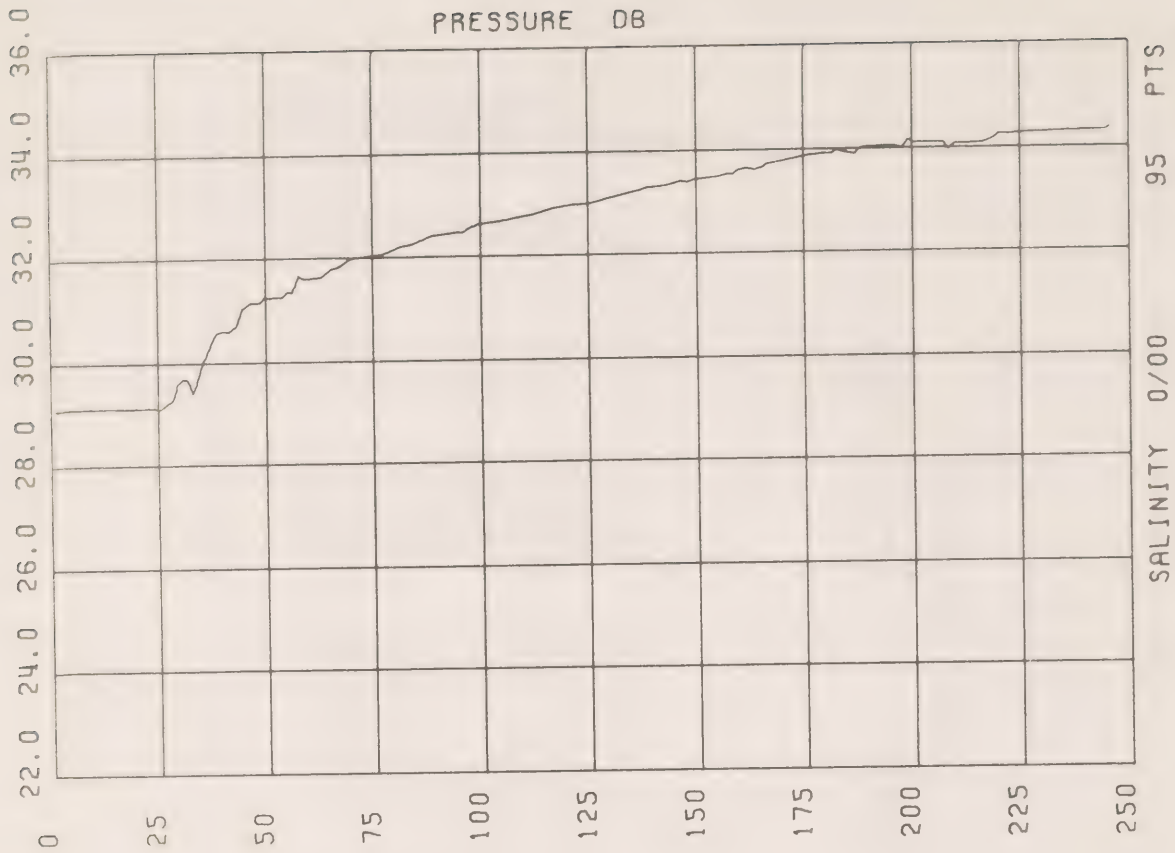


CRUISE NUMBER 69051 STATION NUMBER 070

LAT N48 30.00
 LONG W 62 45.00
 DEPTH 368.0
 MARSQ SQ
 YEAR 1969
 MONTH 9
 DAY 26
 H/M 1211
 WAVE-P/H
 SWEL-P/H
 SWEL-D
 BARO
 WIND-DIR
 WIND-SPD
 AIR-TEM
 WET-BLB
 WW
 CLD-A
 COUN 18
 INST 10
 RESTR
 UNAS 09H

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.540A	11.539	29.176A	2218	2218	1488.7W	46	3	5658
	20.0	20.2A	11.558A	11.556	29.168B	2217	2217	1488.9W	103	12	5668
	30.0	30.2A	10.789A	10.786	29.571B	2261	2262	1486.9W	159	26	5246
	50.0	50.4A	1.552E	1.550	31.214A	2500	2500	1452.0A	247	61	2967
	75.0	75.5A	0.734C	0.731	32.033B	2570	2570	1449.8W	310	102	2298
	100.0	100.7A	1.095A	1.091	32.623A	2615	2615	1452.6A	362	148	1970
	125.0	125.9A	2.232B	2.225	33.258A	2659	2659	1458.9W	404	196	1467
	150.0	151.0A	2.569A	2.560	33.497A	2675	2675	1461.2A	439	246	1315
	175.0	176.2A	2.937W	2.926	33.704A	2688	2688	1463.5W	471	299	1191
	200.0	201.4A	3.721C	3.707	34.079A	2711	2711	1467.7W	498	350	984
	225.0	226.6A	3.921C	3.905	34.277A	2724	2724	1469.2A	521	400	857
	250.0	251.8A	4.082A	4.064	34.354A	2729	2729	1470.4A	541	451	819
	300.0	302.2A	4.287A	4.265	34.506A	2738	2739	1472.3A	580	560	731



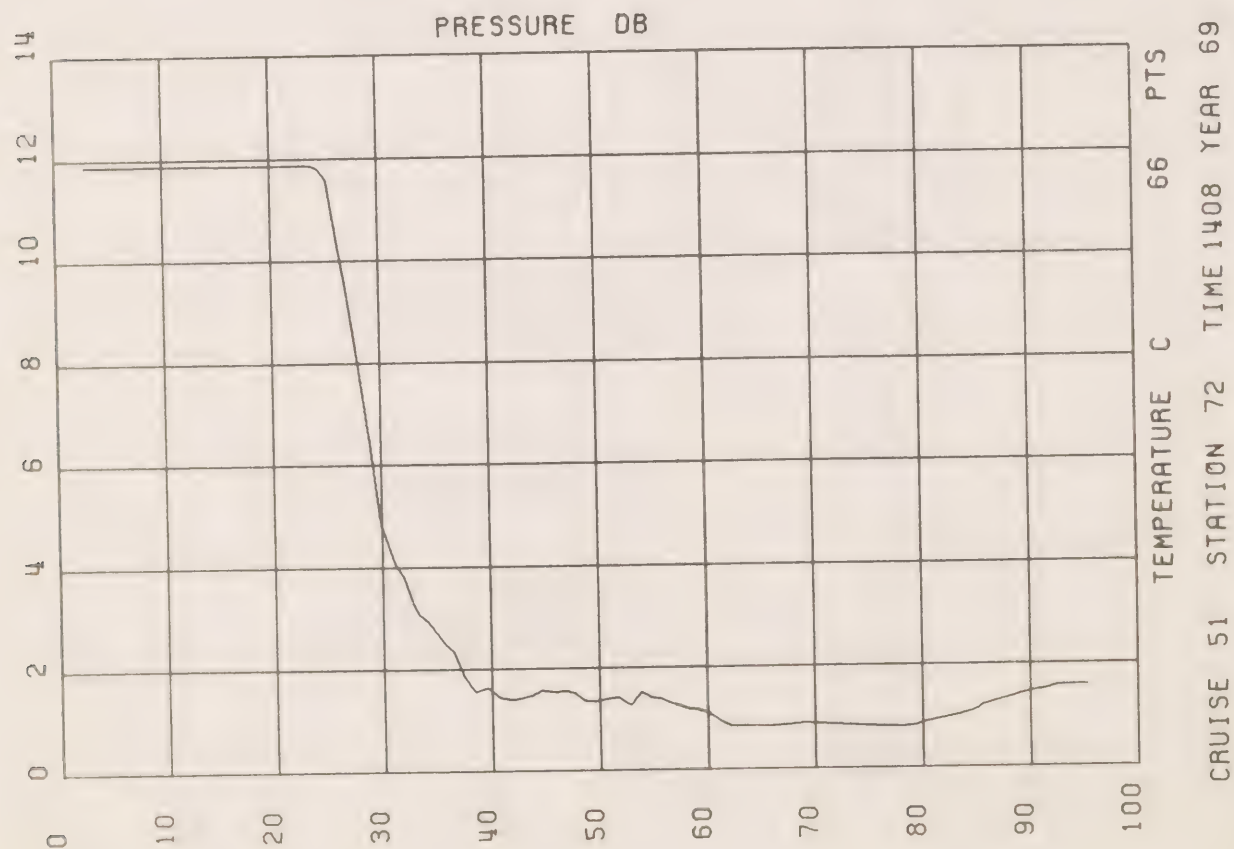
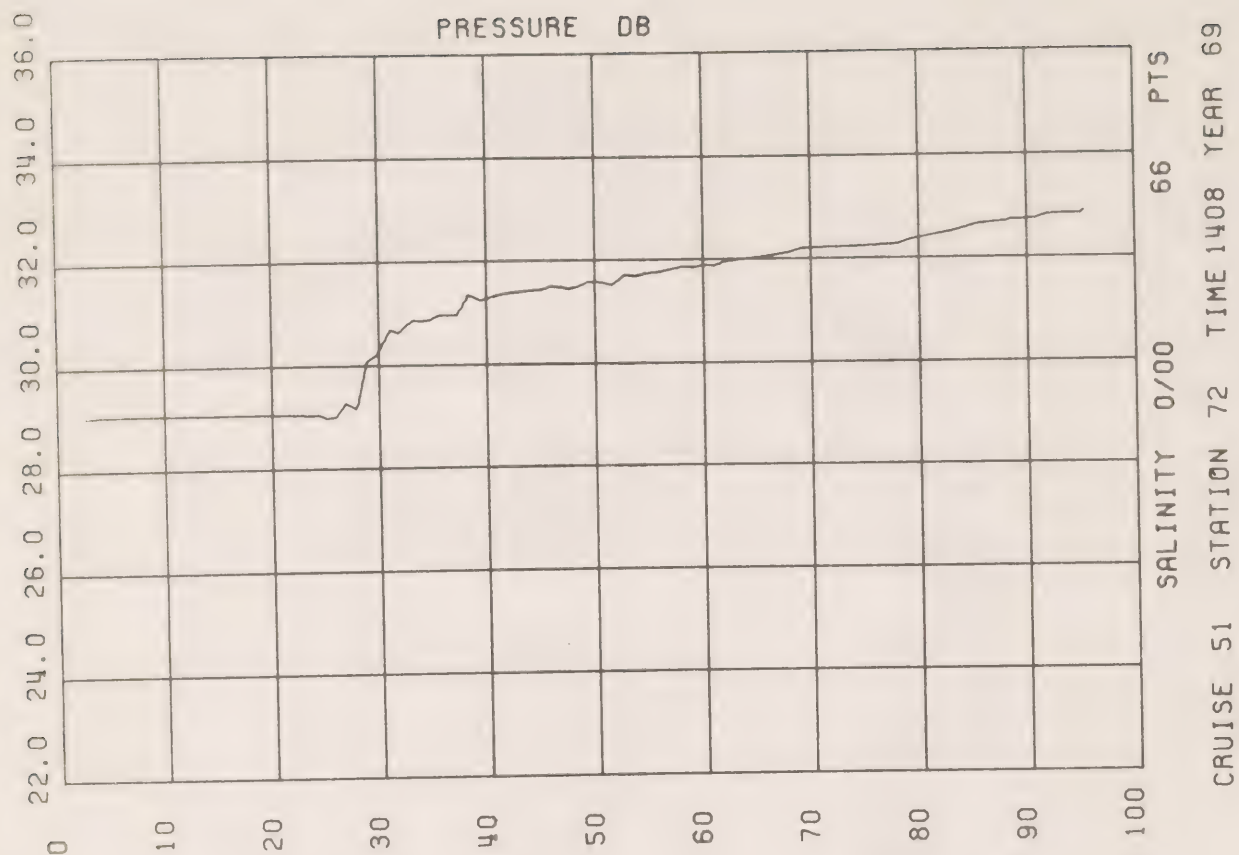
CRUISE NUMBER 69051 STATION NUMBER 071

LAT N48 30.00 YEAR 1969 WAVE-P/H WIND-DIR 030 W 02
 LONG W 63 0.00 MONTH 9 SWEL-P/H 0707 WIND-SPD 20 CLD-A 8
 DEPTH 260.0 DAY 26 SWEL-D 030 AIR-TEM WET-BLB
 MARSD SQ H/M 1310 BARO 1019.1

COUN 18
 INST 10
 RESTR
 UNAS 09G

I N T E R P O L A T E D

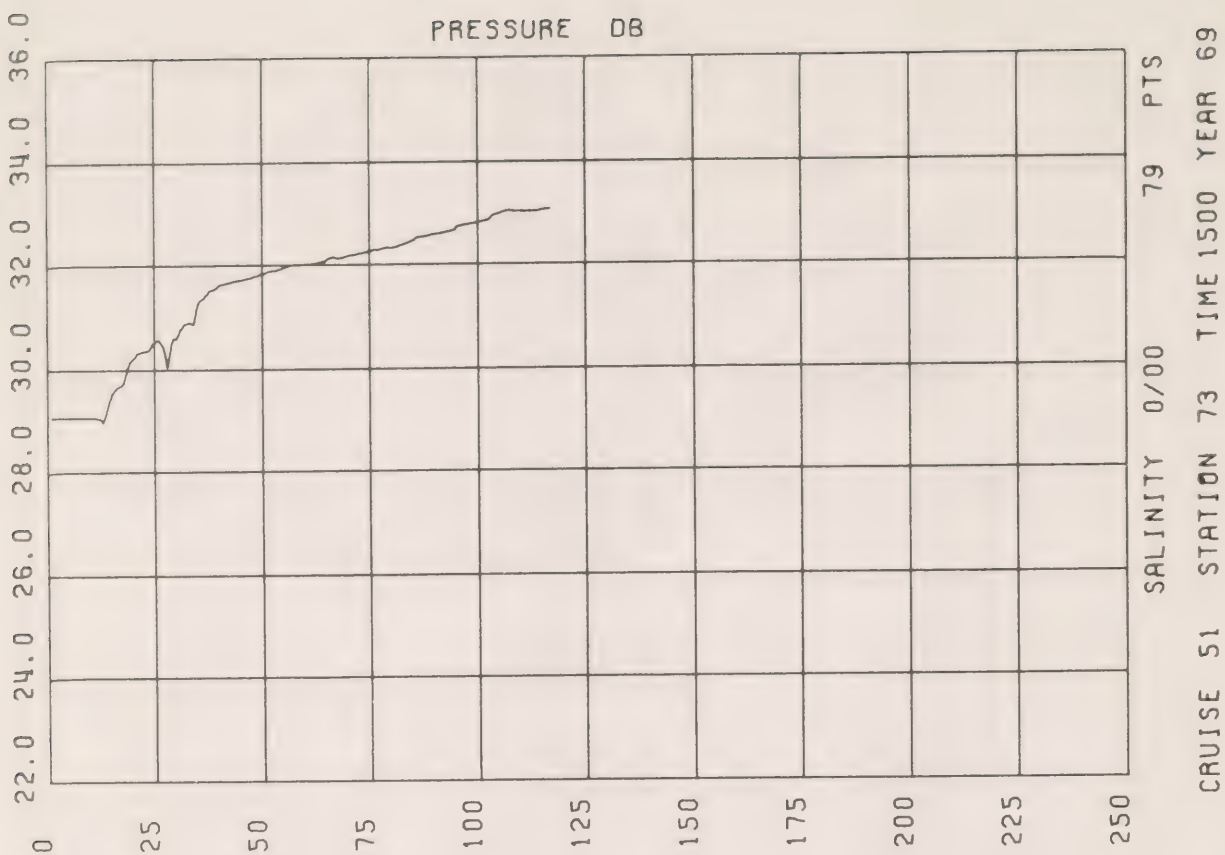
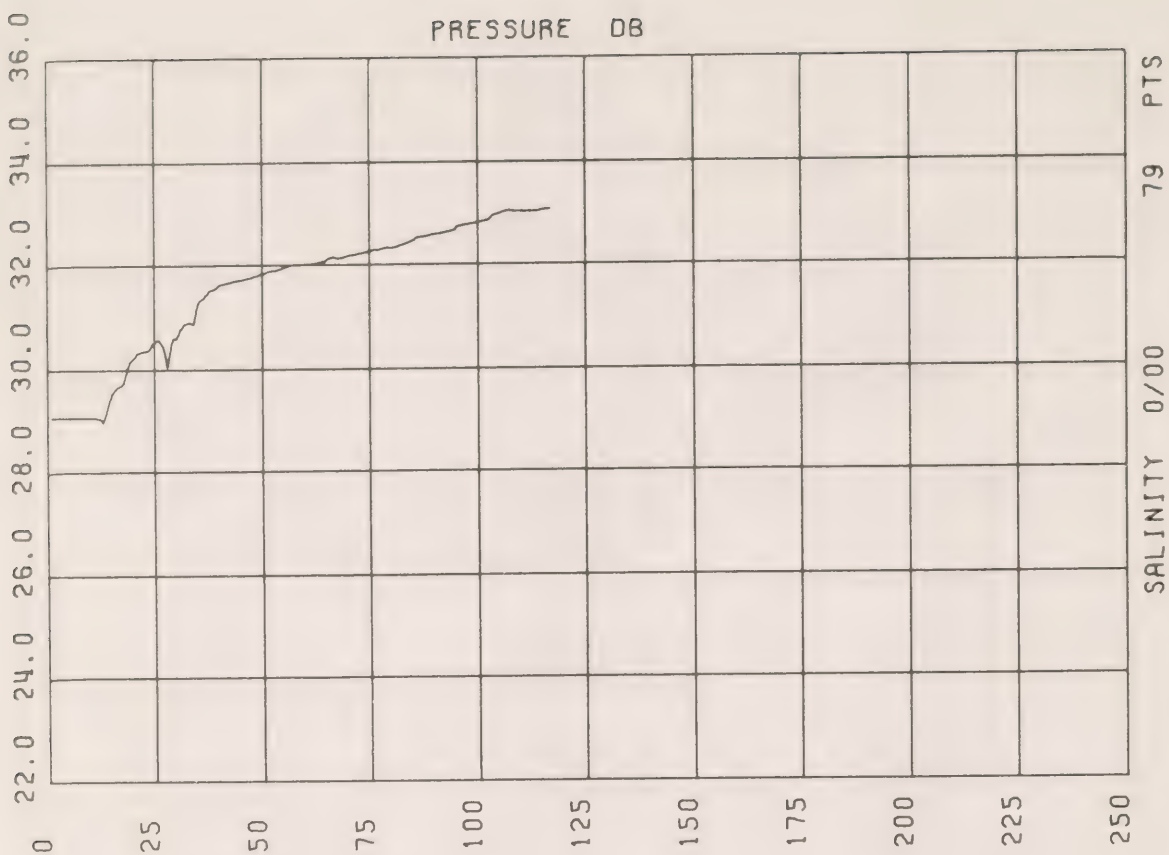
GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.650W	11.650	29.117A	2212	2212	1489.0W	52	3	5720
	20.0	20.2A	11.646W	11.646	29.119A	2212	2212	1489.2W	109	12	5720
	30.0	30.2A	9.619C	9.616	29.688B	2289	2289	1482.7A	166	26	4977
	50.0	50.4A	2.790C	2.787	31.241C	2493	2493	1457.4A	243	58	3035
	75.0	75.5A	0.785A	0.782	32.046A	2571	2571	1450.0W	309	100	2292
	100.0	100.7A	1.185A	1.181	32.641B	2616	2616	1453.0W	361	146	1860
	125.0	125.9A	1.793A	1.787	33.011B	2641	2642	1456.6A	405	196	1622
	150.0	151.0A	2.493B	2.485	33.456C	2672	2672	1460.8A	441	249	1340
	175.0	176.2A	3.236B	3.224	33.882A	2699	2699	1465.0W	472	300	1086
	200.0	201.4A	3.780W	3.766	34.078B	2710	2710	1468.0A	499	349	991
	225.0	226.6A	4.230C	4.214	34.269A	2720	2720	1470.5A	522	401	895



CRUISE NUMBER 69051		STATION NUMBER 072	
LAT N48	30.00	YEAR 1969	WAVE-P/H
LONG W 63	15.00	MONTH 9	SWEL-P/H
DEPTH	100.0	DAY 26	SWEL-D
MARSD SQ		H/M 1408	BARO 1020.5
			WET-BLB
		WIND-SPD 030	WIND-DIR 030
		AIR-TEM 20	WV CLD-A 8
			COUN 18
			INST 10
			RESTR
			UNAS 09F

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.870W	11.869	29.061W	2204	2204	1489.7W	43	3	5798
	20.0	20.2A	11.868W	11.867	29.057W	2204	2204	1489.9W	101	12	5804
	30.0	30.2A	4.454F	4.452	30.321D	2406	2406	1463.4A	156	26	3866
	50.0	50.4A	1.381A	1.379	31.574A	2530	2530	1451.7A	217	51	2684
	75.0	75.5A	0.817W	0.814	32.242A	2586	2586	1450.4W	276	88	2143

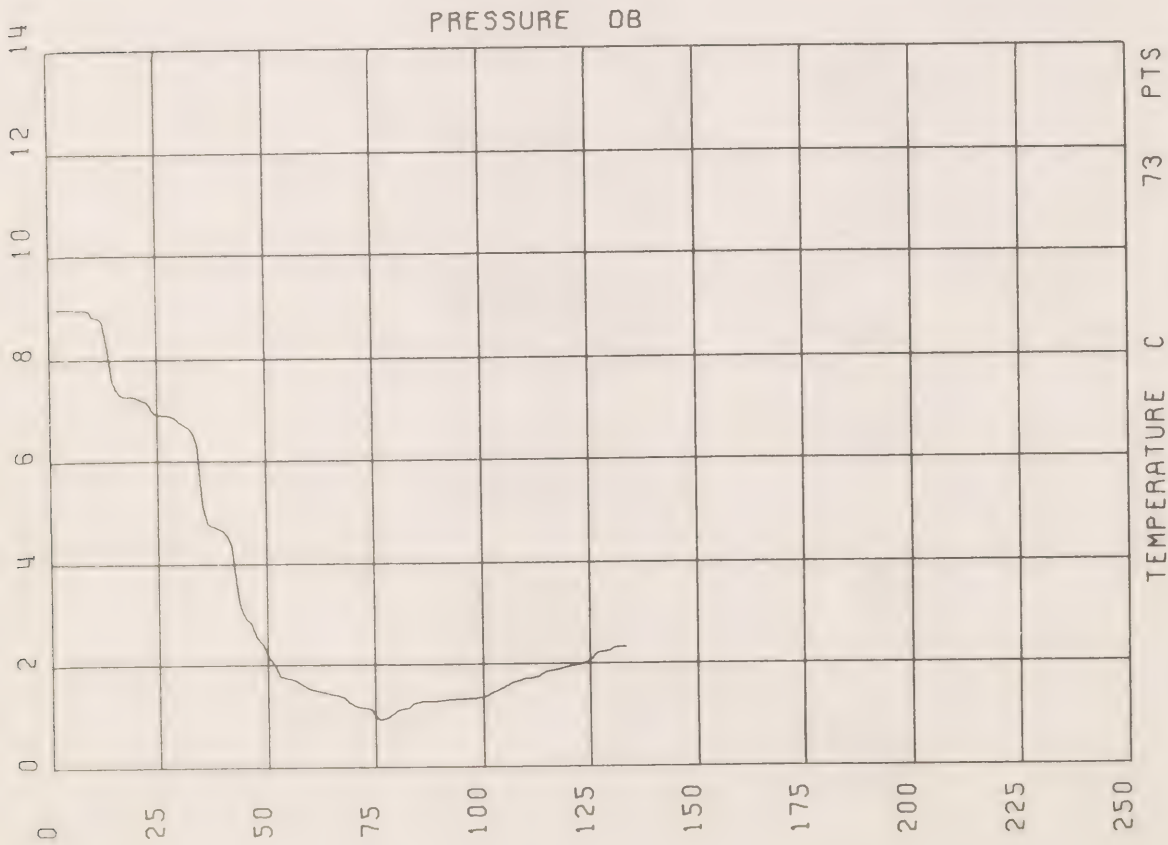
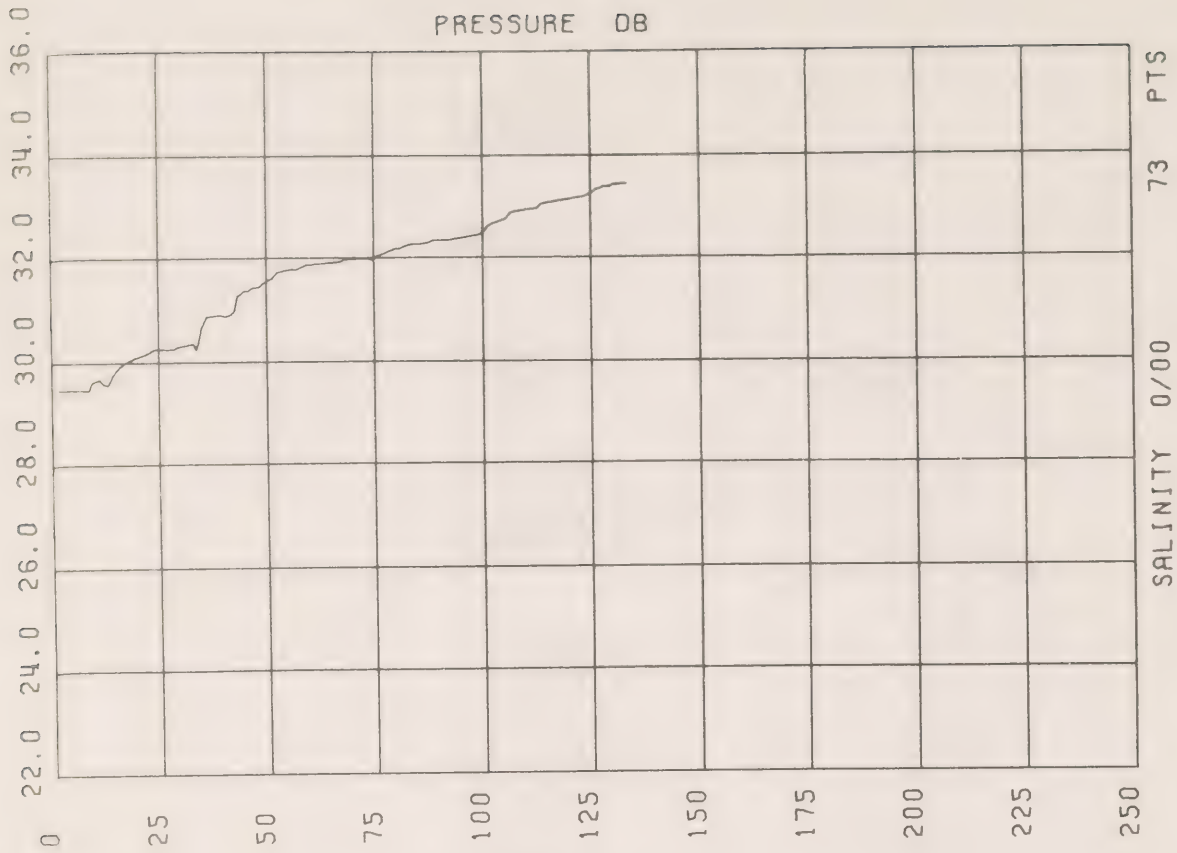


CRUISE NUMBER 69051 STATION NUMBER 073

LAT	N48	30.00	YEAR	1969	WAVE-P/H	WIND-DIR	030	WW	02	COUN	18
LONG	W 63	30.00	MONTH	9	SWEL-P/H	0706	20	CLD-A	8	INST	10
DEPTH		120.0	DAY	26	SWEL-D	050	7.9			RESTR	
MARSD	SQ		H/M	1500	BARO	1020.6	6.9			UNAS	09E

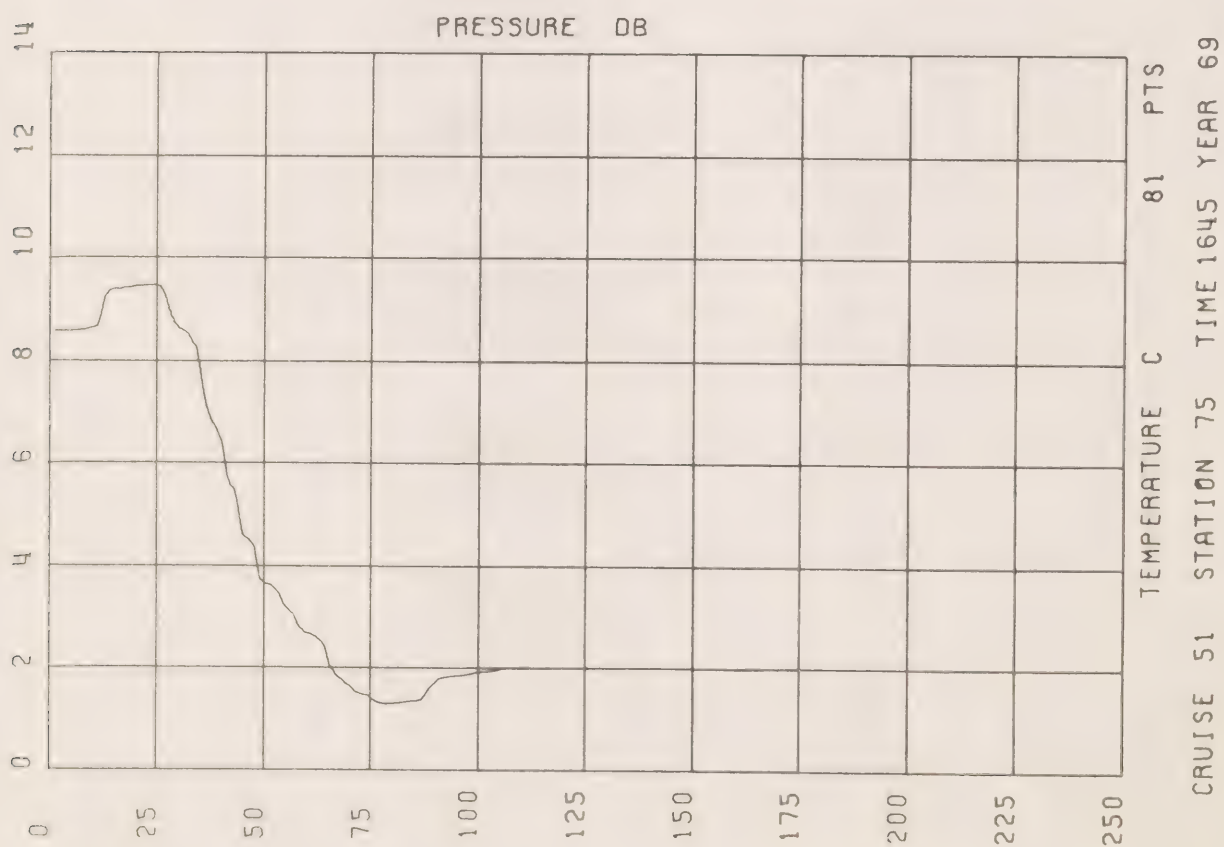
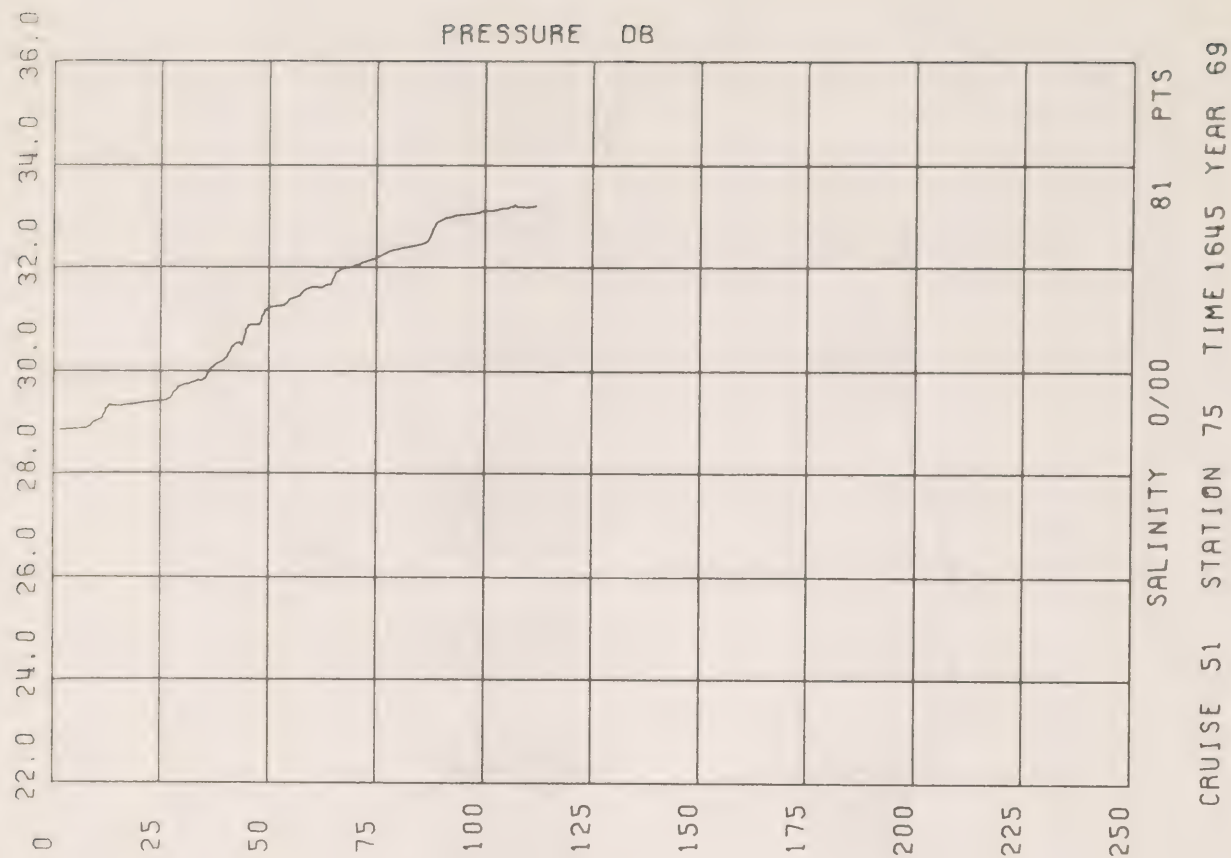
INTERPOLATED

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEDA	CHI	SVA
	10.0	10.1A	11.860W	11.859	29.067W	2204	2204	1489.7W	55	3	5793
	20.0	20.2A	7.540A	7.538	30.214A	2361	2361	1475.2A	106	11	4295
	30.0	30.2A	3.438E	3.436	30.612C	2439	2439	1459.0A	146	21	3555
	50.0	50.4A	1.322A	1.320	31.843B	2552	2552	1451.7A	203	44	2477
	75.0	75.5A	0.813W	0.810	32.289A	2590	2590	1450.5A	260	81	2109
	100.0	100.7A	1.455B	1.450	32.820B	2629	2629	1454.5A	308	124	1743



CRUISE NUMBER 69051				STATION NUMBER 074					
LAT	N48 30.00	YEAR	1969	WAVE-P/H	0504	WIND-DIR	030	COUN	18
LONG	W 63 45.00	MONTH	9	SWEL-P/H	0706	WIND-SPD	15	INST	10
DEPTH	138.0	DAY	26	SWEL-D	050	AIR-TEM	8.0	RESTR	
MARSD	SQ	H/M	1557	BARO	1020.6	WET-BLB	7.6	UNAS	09D

I N T E R P O L A T E D											
GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.848E	8.847	29.753C	2307	2307	1479.3A	43	2	4812
	20.0	20.2A	7.241A	7.239	30.103A	2356	2356	1473.9W	89	10	4340
	30.0	30.2A	6.741B	6.738	30.291B	2378	2378	1472.4A	132	21	4137
	50.0	50.4A	2.113C	2.111	31.574B	2524	2524	1454.9A	200	48	2732
	75.0	75.5A	0.934A	0.931	32.022B	2569	2569	1450.6A	262	88	2317
	100.0	100.7A	1.369A	1.365	32.534A	2606	2606	1453.8A	315	135	1954
	125.0	125.9A	2.144C	2.137	33.297A	2662	2663	1458.6A	357	183	1430



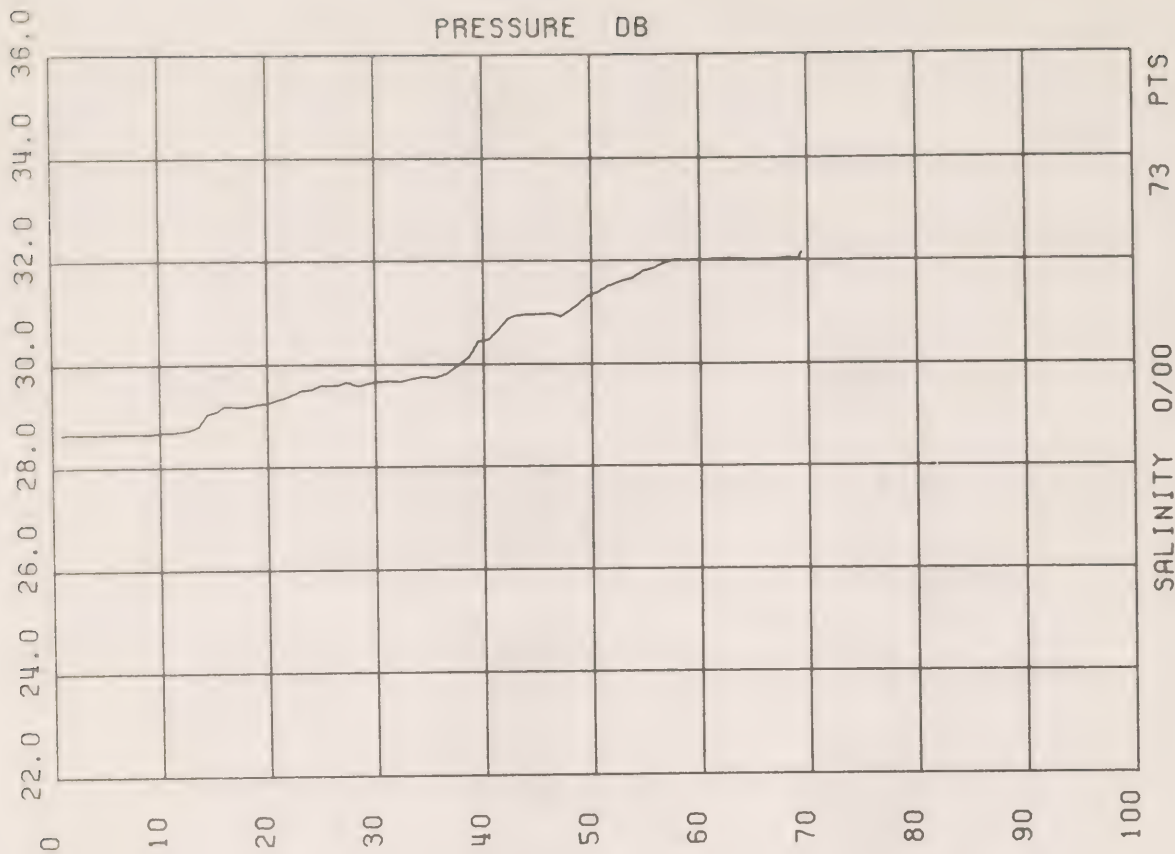
CRUISE NUMBER 69051 STATION NUMBER 075
 LAT N48 30.00 YEAR 1969 WAVE-P/H WIND-DIR 030 W'W 02
 LONG W 64 0.00 MONTH 9 SWEL-P/H WIND-SPD 15 CLD-A 8
 DEPTH 114.0 DAY 26 SWEL-D AIR-TEM 7.6
 MARSD SQ H/M 1648 BARO WET-BLB 6.5

COUN 18
 INST 10
 RESTR
 UNAS 09C

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.613C	8.612	29.021C	2252	2252	1477.7A	49	3	5329
	20.0	20.2A	9.459A	9.457	29.376A	2267	2267	1481.6A	102	12	5184
	30.0	30.2A	8.638A	8.635	29.731A	2307	2307	1479.1A	153	24	4803
	50.0	50.4A	3.653C	3.650	31.235C	2484	2484	1461.1A	235	57	3115
	75.0	75.5A	1.378A	1.375	32.198A	2579	2579	1452.9W	301	99	2211
	100.0	100.7A	1.923W	1.918	33.100W	2648	2648	1456.9A	348	141	1563

PRESSURE DB

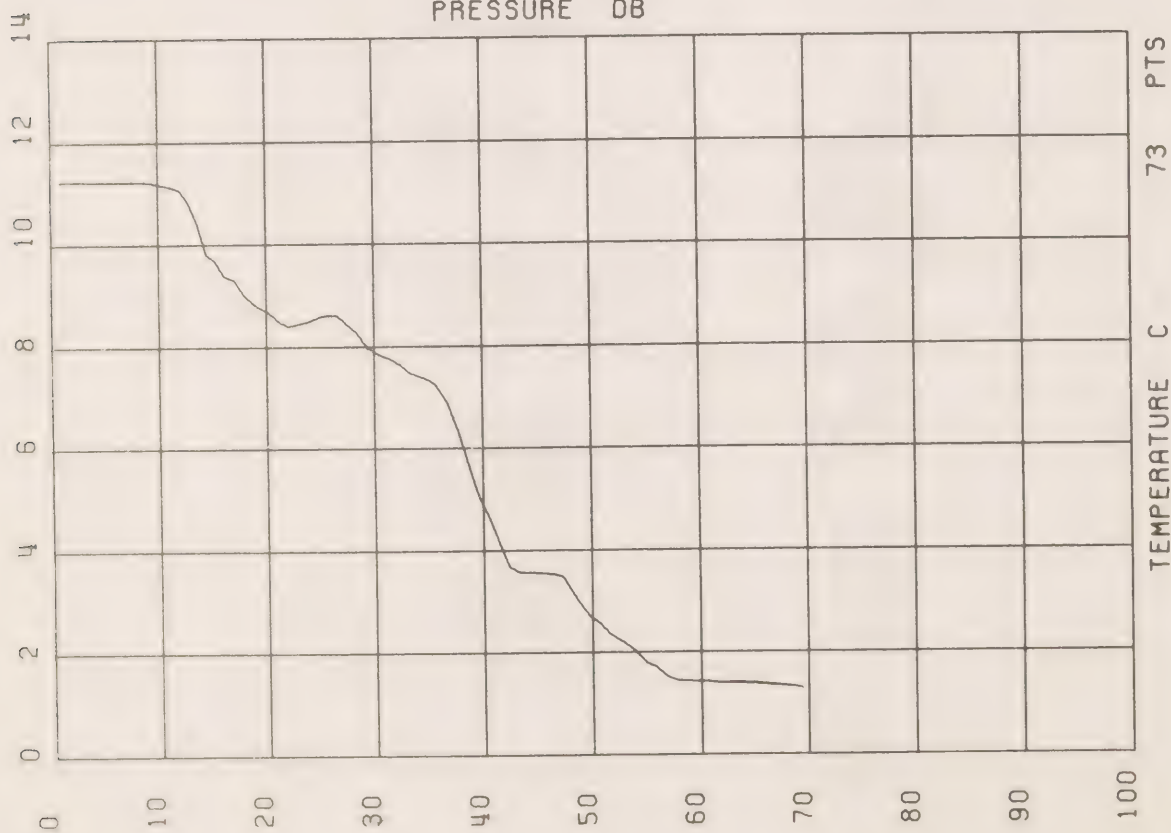


SALINITY 0/00

73 PTS

CRUISE 51 STATION 76 TIME 1939 YEAR 69

PRESSURE DB



TEMPERATURE C

73 PTS

CRUISE 51 STATION 76 TIME 1939 YEAR 69

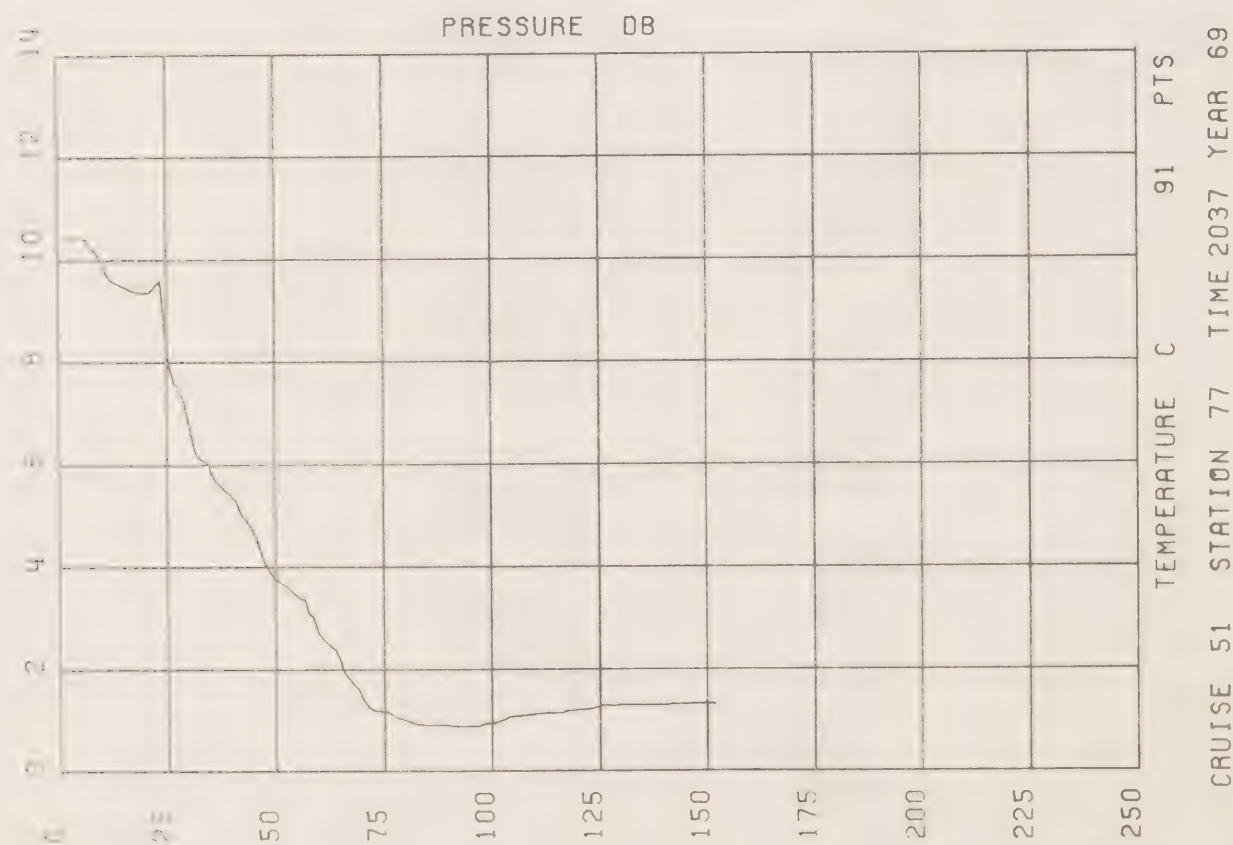
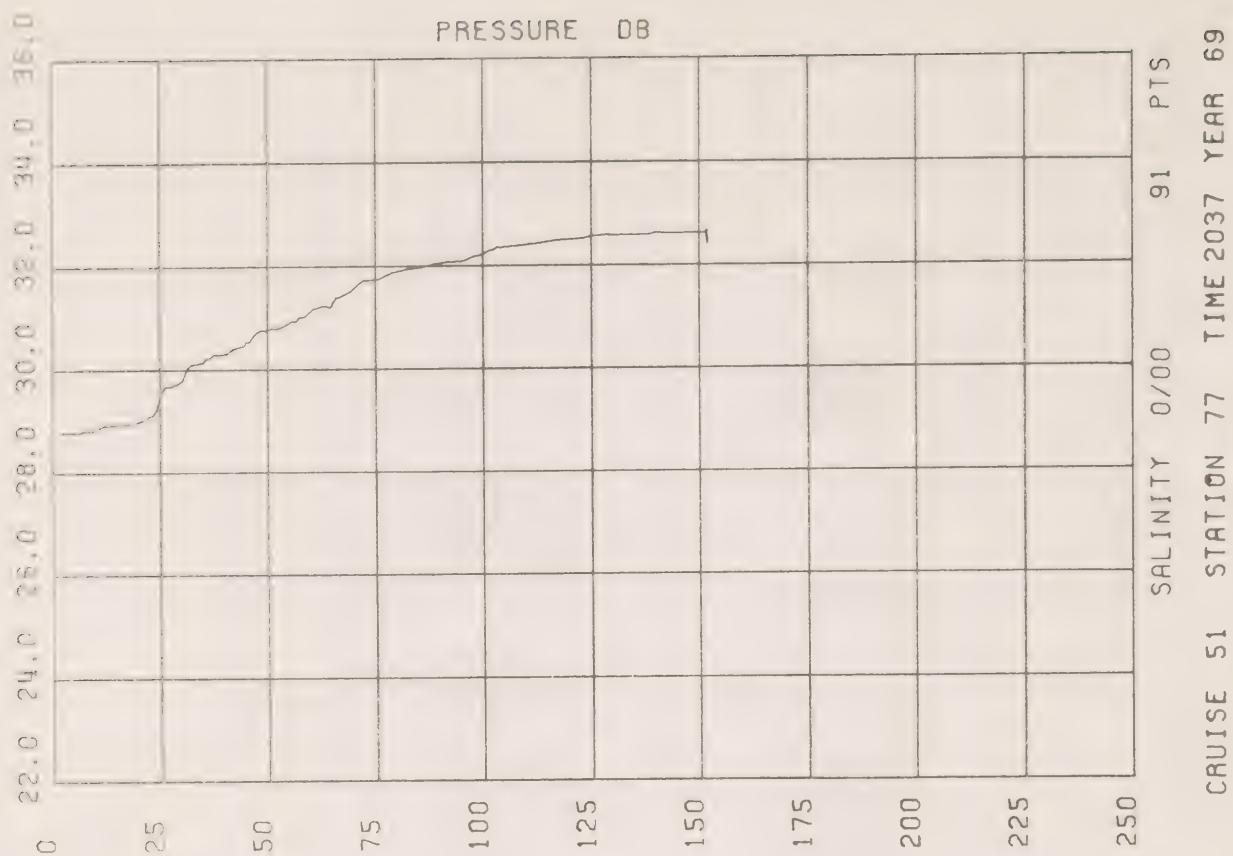
CRUISE NUMBER 69051 STATION NUMBER 076

LAT	N48	20.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	30.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		74.0	DAY	26	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	1942	BARO	WET-BLB	UNAS	10A

WW	CLD-A
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I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.178A	11.177	28.683W	2186	2186	1486.8W	56	3	5962
	20.0	20.2A	8.674A	8.672	29.263A	2271	2271	1478.4A	112	12	5156
	30.0	30.2A	7.861A	7.858	29.664A	2313	2313	1476.0A	161	25	4747
	50.0	50.4A	2.615A	2.612	31.369A	2504	2504	1456.8A	239	56	2923



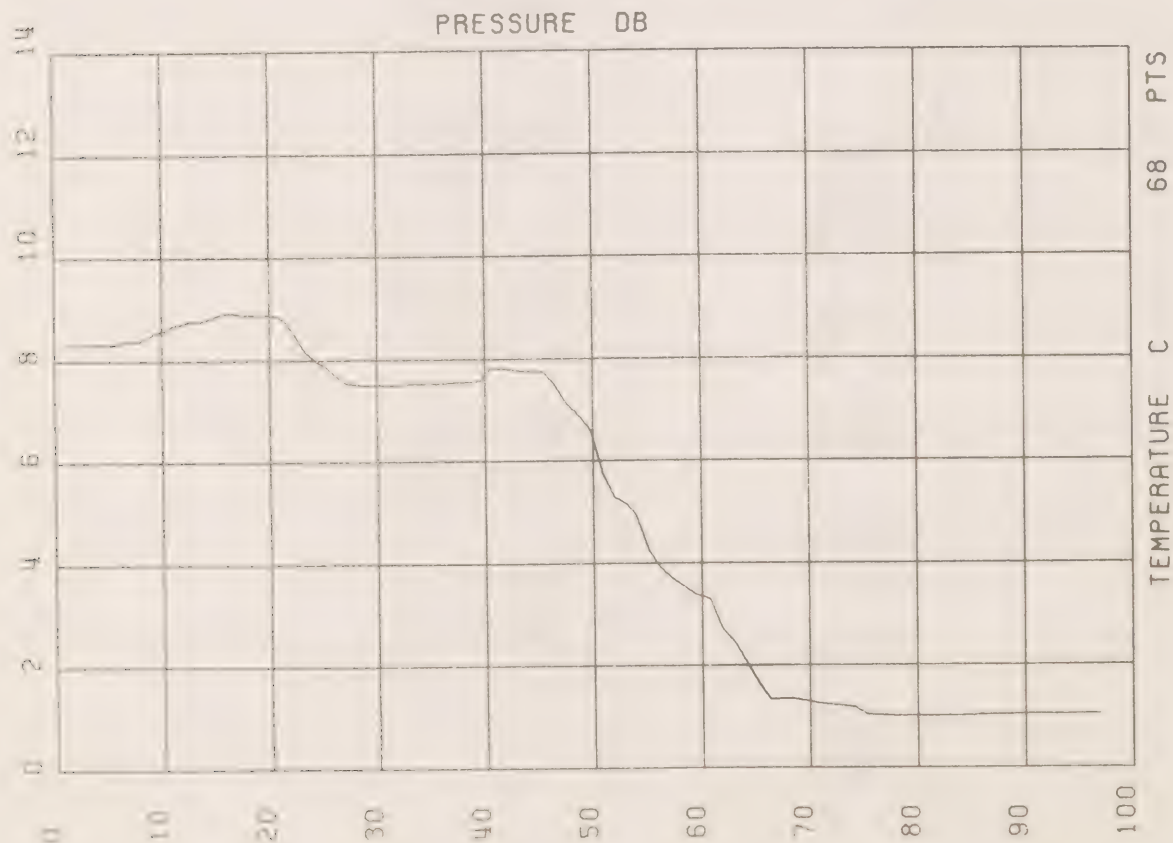
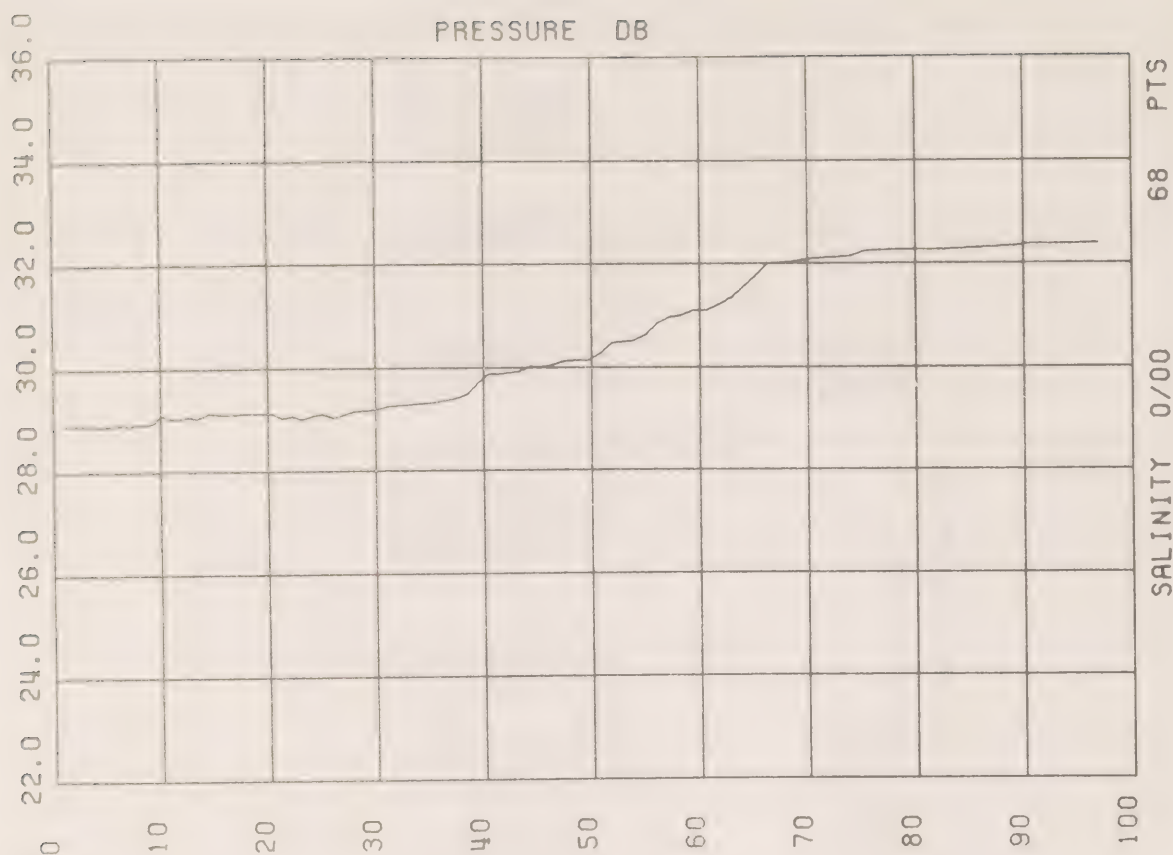
CRUISE NUMBER 69051 STATION NUMBER 077

LAT	N48	20.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	15.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		152.0	DAY	26	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	2039	BARO	WET-BLB	UNAS	108

WV
CLD-A

INTERPOLATED

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEDA	CHI	SVA
	10.0	10.1A	9.893A	9.892	28.867A	2221	2221	1482.3A	49	3	5625
	20.0	20.2A	9.330W	9.328	28.994A	2240	2240	1480.6W	104	12	5448
	30.0	30.2	6.680	6.677	29.786	2338	2338	1471.4	154	24	4510
	50.0	50.4A	3.716A	3.713	30.778C	2449	2449	1460.7A	233	56	3461
	75.0	75.5A	1.165A	1.162	31.744A	2545	2545	1451.3W	308	105	2542
	100.0	100.7A	0.935A	0.931	32.260W	2587	2587	1451.4W	367	157	2137
	125.0	125.9	1.280	1.274	32.574	2610	2610	1453.8	417	215	1918
	150.0	151.0A	1.330W	1.323	32.621A	2614	2614	1454.5W	465	282	1885



CRUISE NUMBER 69051 STATION NUMBER 078

LAT	N48	20.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	0.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		100.0	DAY	26	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	2134	BARO	WET-BLB	UNAS	10C

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEDA	CHI	SVA
	10.0	10.1	8.550	8.549	29.113	2261	2261	1477.6	49	3	5249
	20.0	20.2A	8.883W	8.881	29.119A	2256	2257	1479.0W	103	11	5293
	30.0	30.2A	7.499W	7.496	29.199A	2282	2282	1473.9A	154	24	5049
	50.0	50.4A	6.105E	6.101	30.202A	2378	2378	1470.0A	249	63	4131
	75.0	75.5A	1.038W	1.035	32.253B	2585	2585	1451.4W	322	108	2154

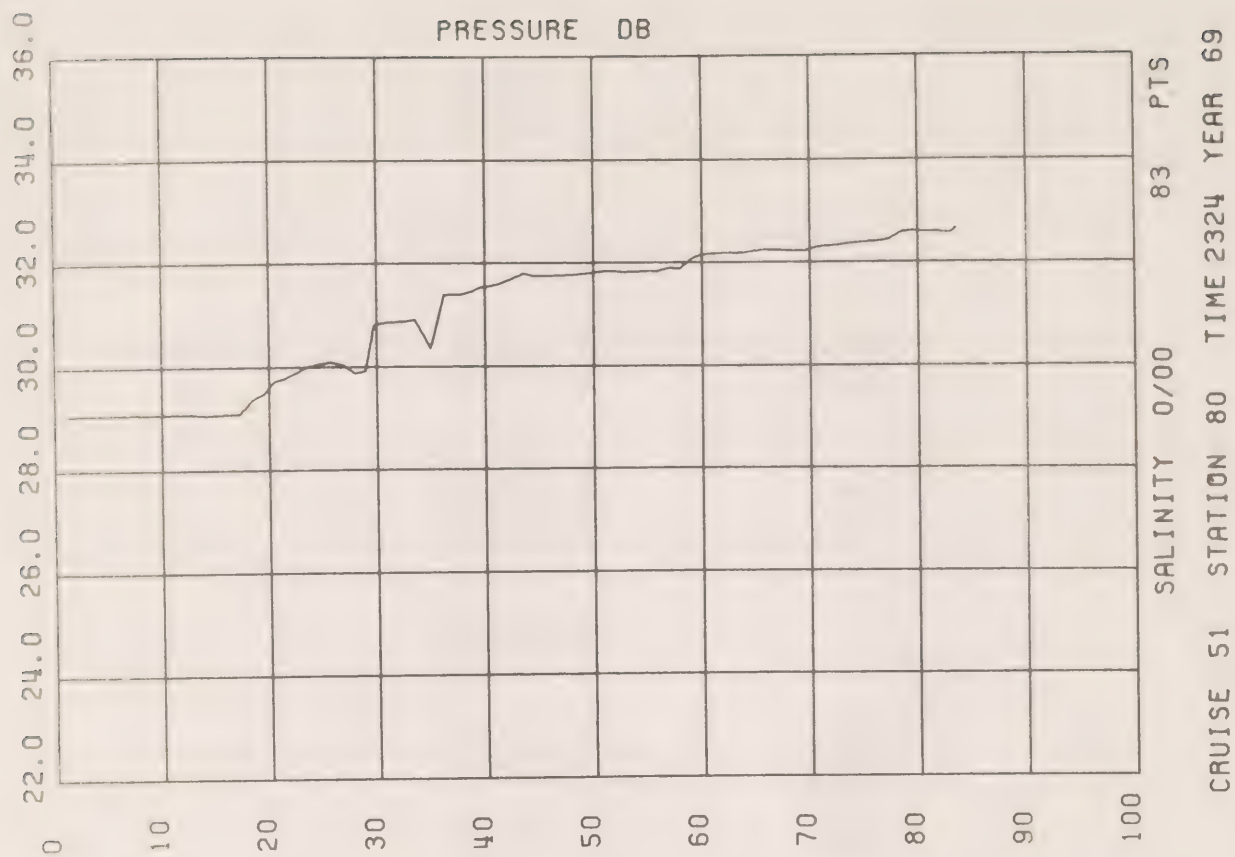


CRUISE NUMBER 69051 STATION NUMBER 079

LAT	N48	20.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 63	45.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		84.0	DAY	26	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	2226	BARO	WET-BLB	UNAS	100
					1022.3			

INTERPOLATED

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	9.990W	9.989	29.398A	2261	2261	1483.4W	48	2	5246
	20.0	20.2A	9.161C	9.159	29.600W	2290	2290	1480.7A	100	11	4974
	30.0	30.2A	6.697D	6.694	30.217C	2372	2372	1472.1A	146	23	4188
	50.0	50.4A	1.325A	1.323	31.844C	2551	2551	1451.8A	210	48	2476
	75.0	75.5A	1.079W	1.076	32.165A	2579	2579	1451.5W	270	86	2216

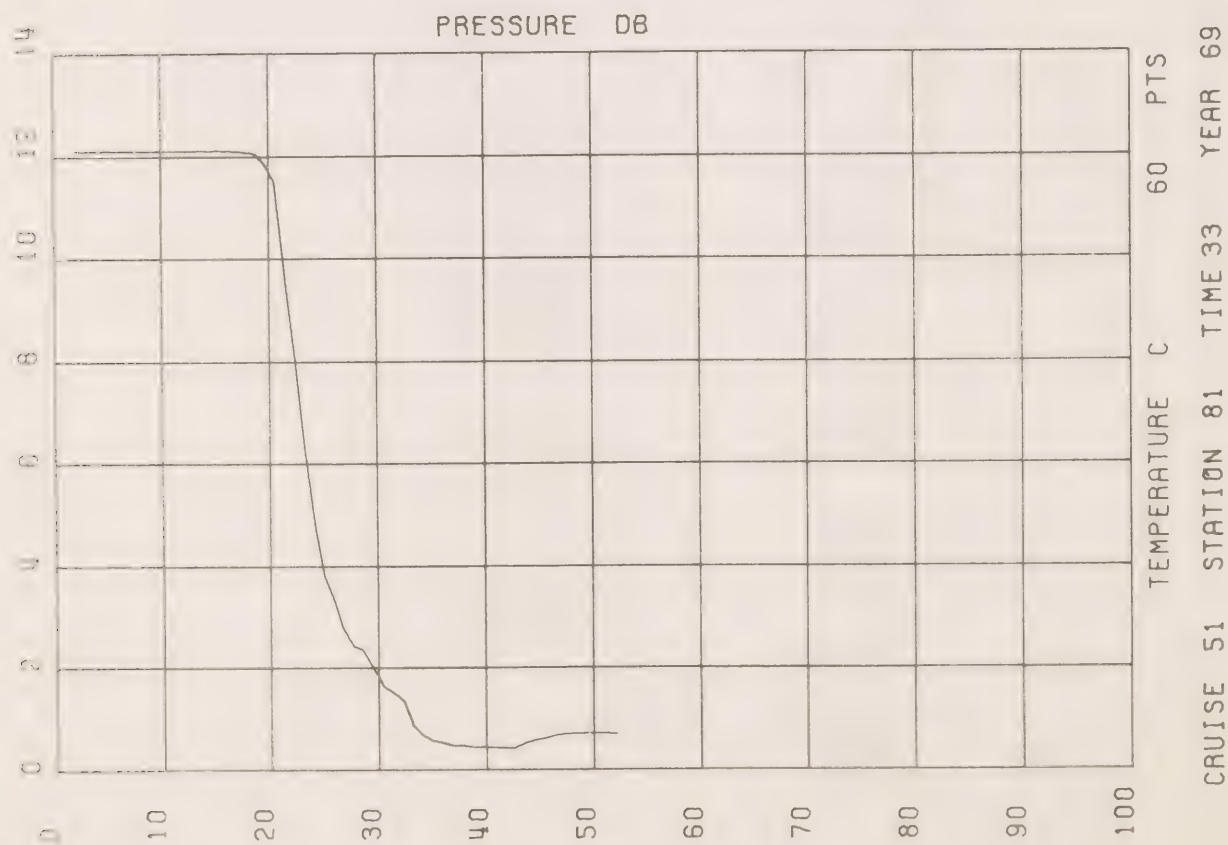
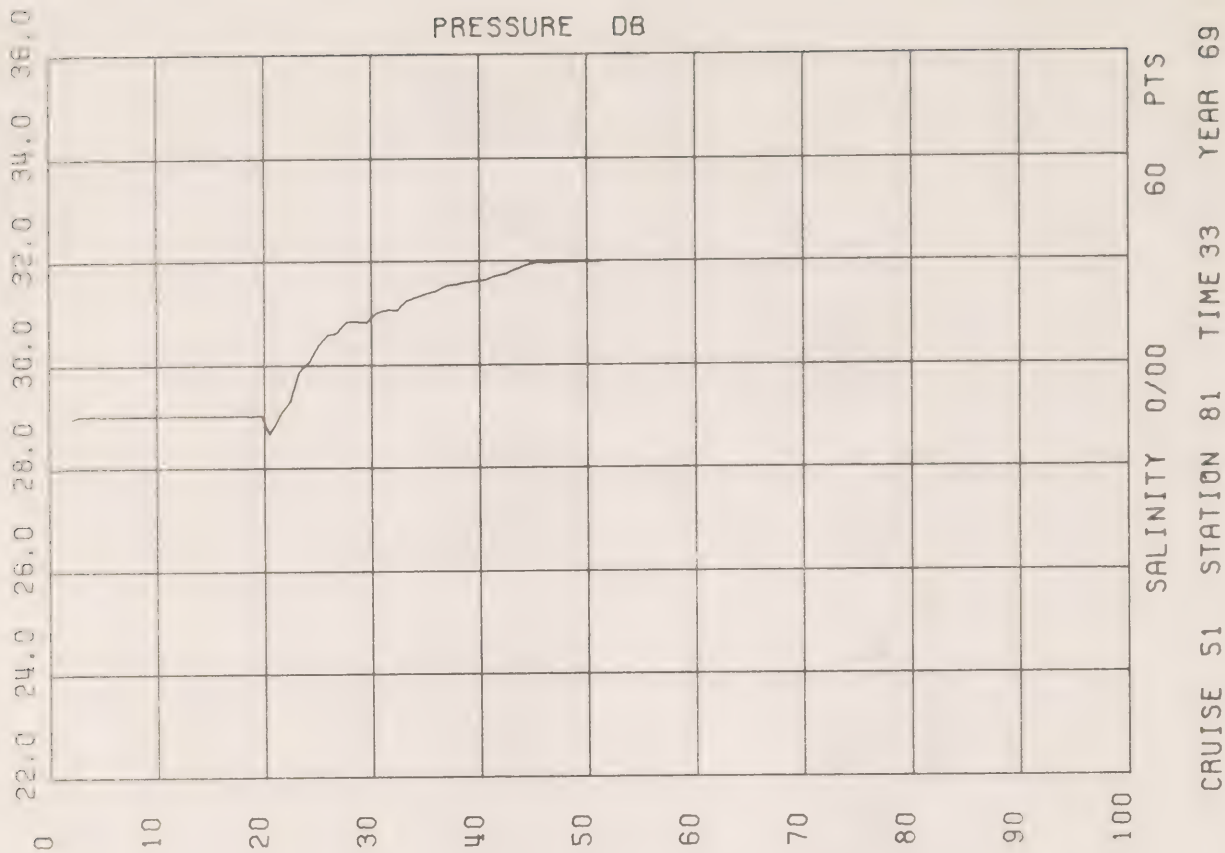


CRUISE NUMBER 69051 STATION NUMBER 080

LAT	N48	20.00	YEAR	1969	WAVE-P/H	WIND-DIR	030	WW	COUN	18
LONG	W 63	30.00	MONTH	9	SWEL-P/H	WIND-SPD	18	CLD-A	INST	10
DEPTH		88.0	DAY	26	SWEL-D	AIR-TEM			RESTR	
MARSD	SQ		H/M	2324	BARO	1021.8	WET-BLB		UNAS	10E

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.438W	11.437	29.080A	2213	2213	1488.2W	52	3	5711
	20.0	20.2A	7.886C	7.884	29.661C	2312	2312	1475.9A	108	12	4768
	30.0	30.2A	3.516D	3.514	30.837D	2455	2455	1459.7A	151	23	3399
	50.0	50.4A	1.106W	1.104	31.820A	2551	2551	1450.8A	209	46	2482
	75.0	75.5A	0.965A	0.962	32.393A	2598	2598	1451.3A	265	82	2037

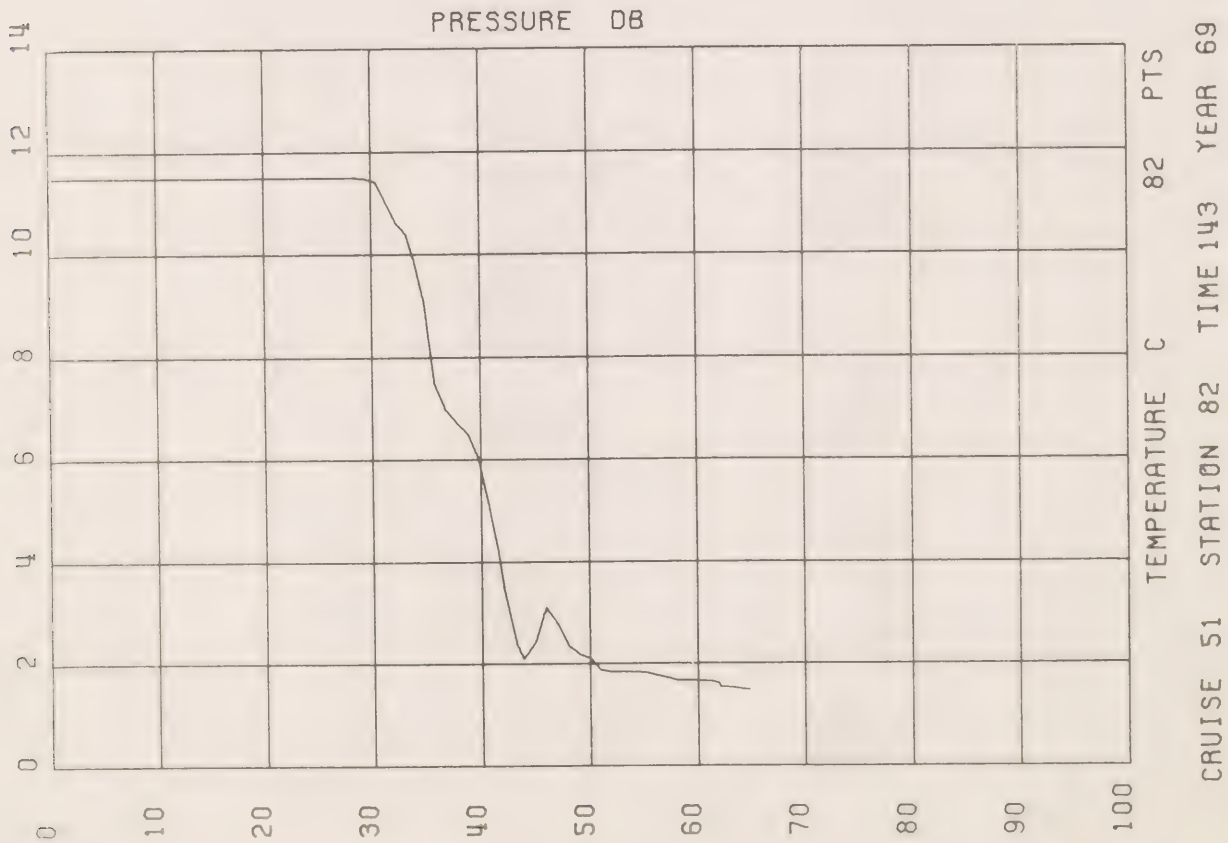
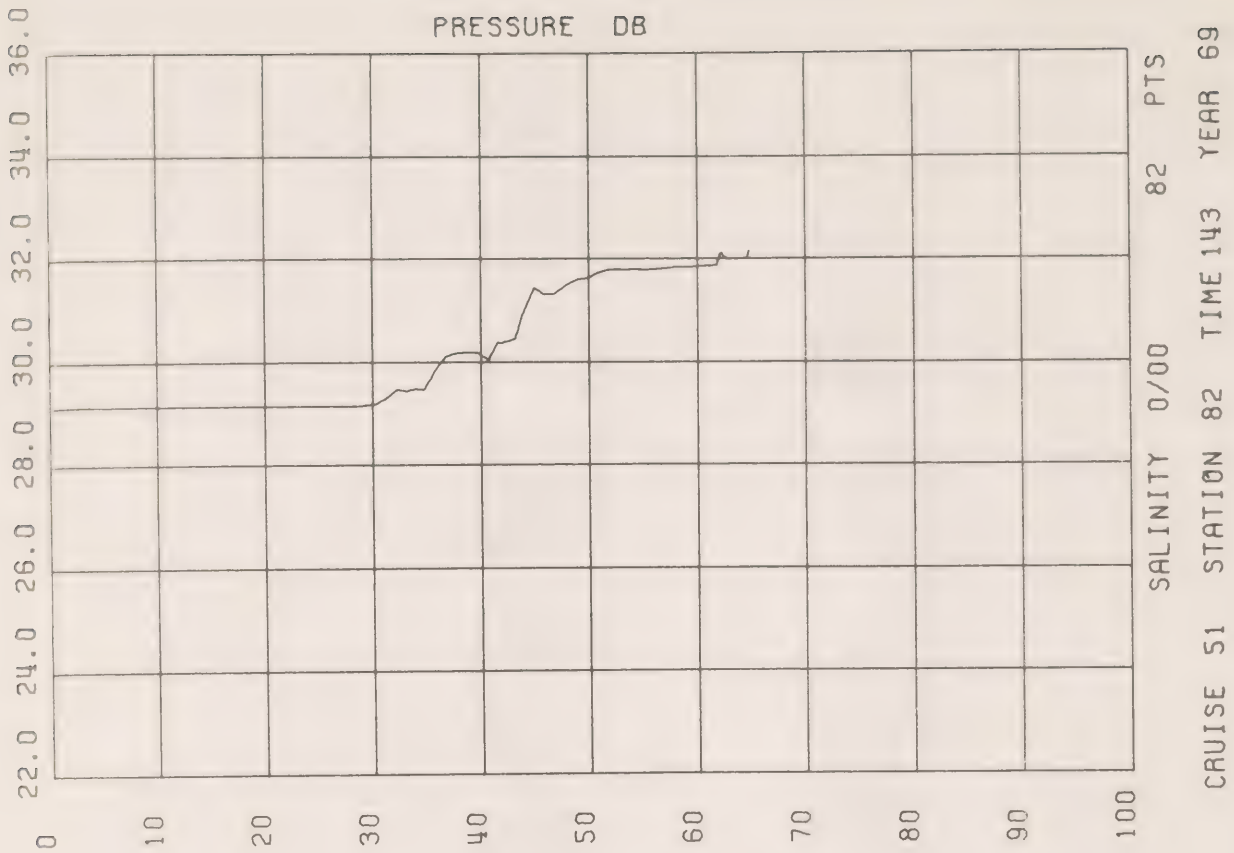


CRUISE NUMBER 69051 STATION NUMBER 081

LAT	N48	20.00	YEAR	1969	WAVE-P/H	WIND-DIR	030	WW	03	COUN	18
LONG	W 63	15.00	MONTH	9	SWEL-P/H	WIND-SPD	20	CLD-A	8	INST	10
DEPTH		56.0	DAY	27	SWEL-D	AIR-TEM				RESTR	
MARSD	SQ		H/M	0032	BARO	1021.7	WET-BLB			UNAS	10F

I N T E R P O L A T E D

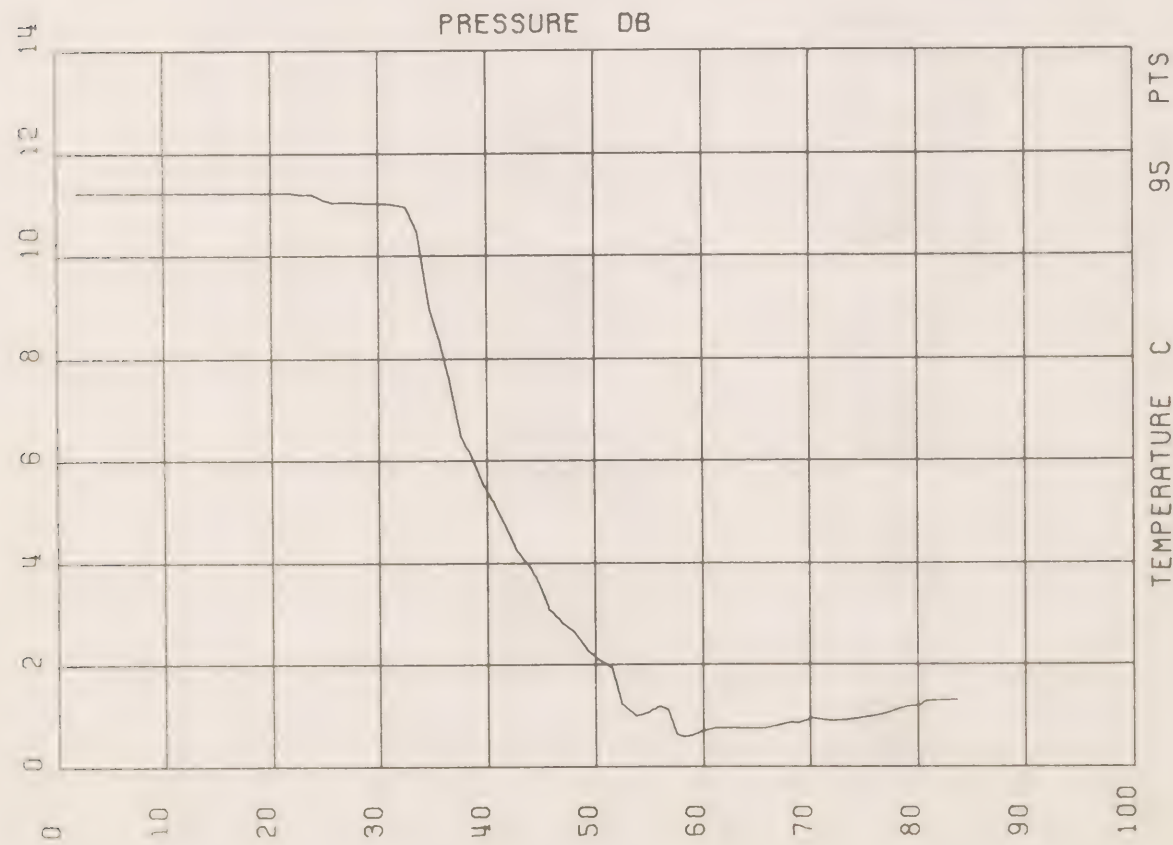
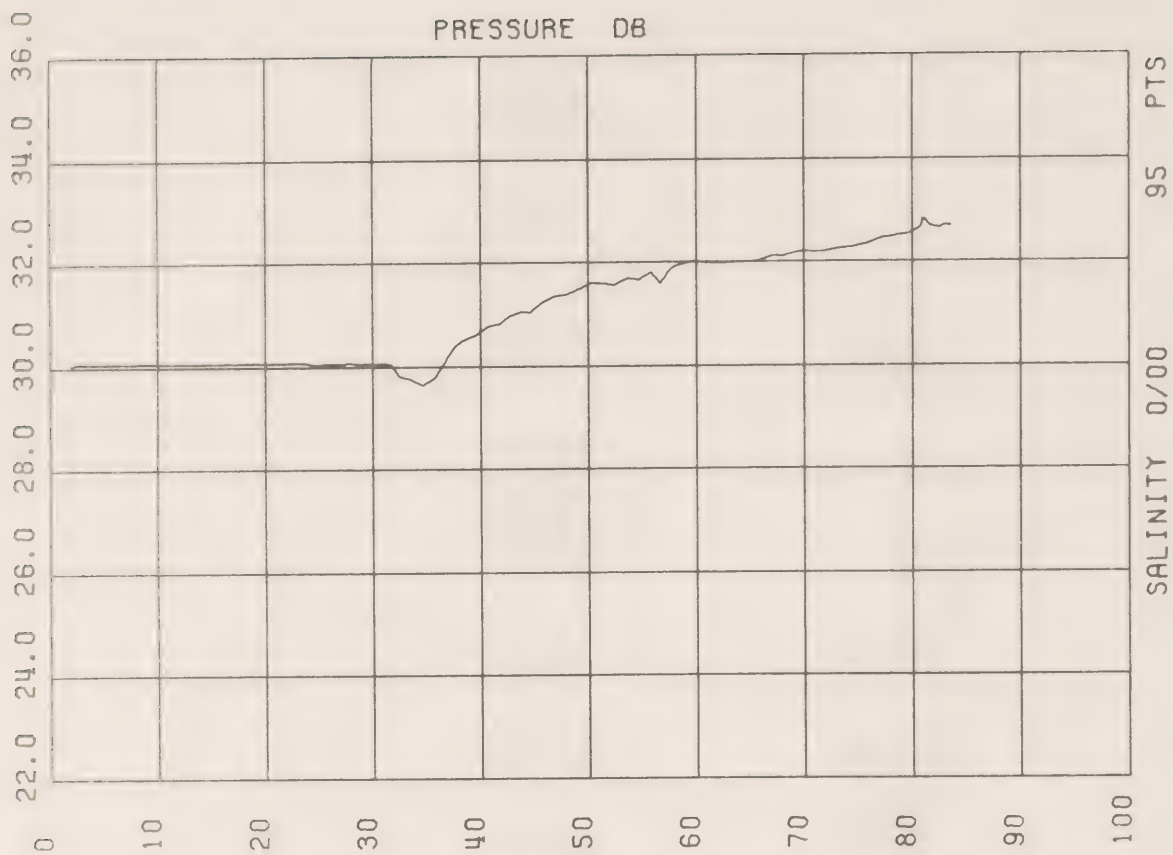
GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	12.110W	12.109	29.012W	2195	2195	1490.5W	47	3	5876
	20.0	20.2A	11.660E	11.658	28.785W	2189	2189	1489.1A	106	12	5939
	30.0	30.2A	1.737C	1.736	30.968C	2479	2479	1452.0A	147	23	3169
	50.0	50.4	0.720	0.718	31.984	2566	2566	1449.2	200	44	2336



CRUISE NUMBER 69051		STATION NUMBER 082	
LAT N48 20.00	YEAR 1969	WAVE-P/H	WIND-DIR 030
LONG W 63 0.00	MONTH 9	SWEL-P/H 0406	WIND-SPD 20
DEPTH 68.0	DAY 27	SWEL-D 050	AIR-TEM 10.4
MARSD SQ	H/M 0145	BARO 1021.5	WET-BLB 10.0
			COUN 18
			INST 10
			RESTR 10G
			UNAS

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.500W	11.499	29.135W	2216	2216	1488.5W	56	3	5681
	20.0	20.2A	11.500W	11.498	29.140W	2216	2216	1488.7W	113	12	5679
	30.0	30.2A	11.441B	11.436	29.177A	2220	2220	1488.6W	169	27	5645
	50.0	50.4A	2.000D	1.998	31.683B	2534	2534	1454.5A	251	58	2642



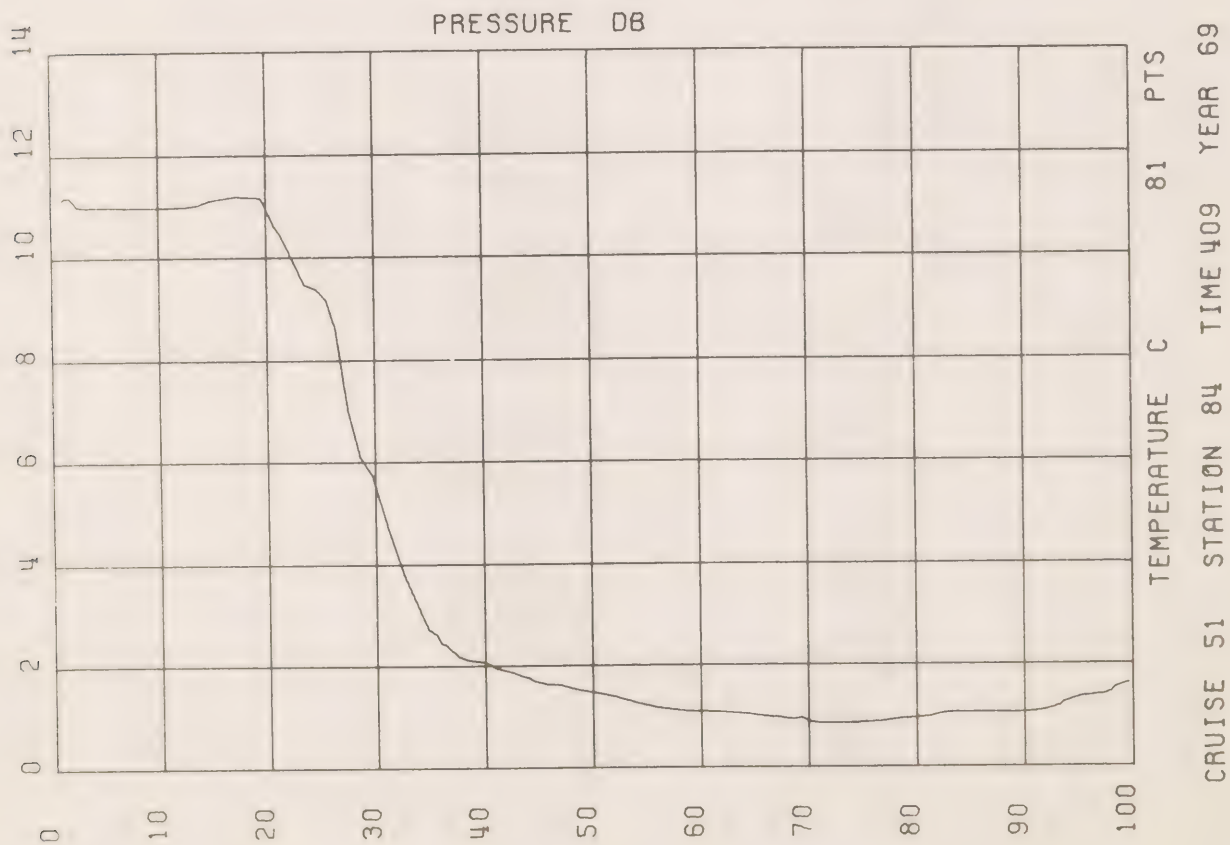
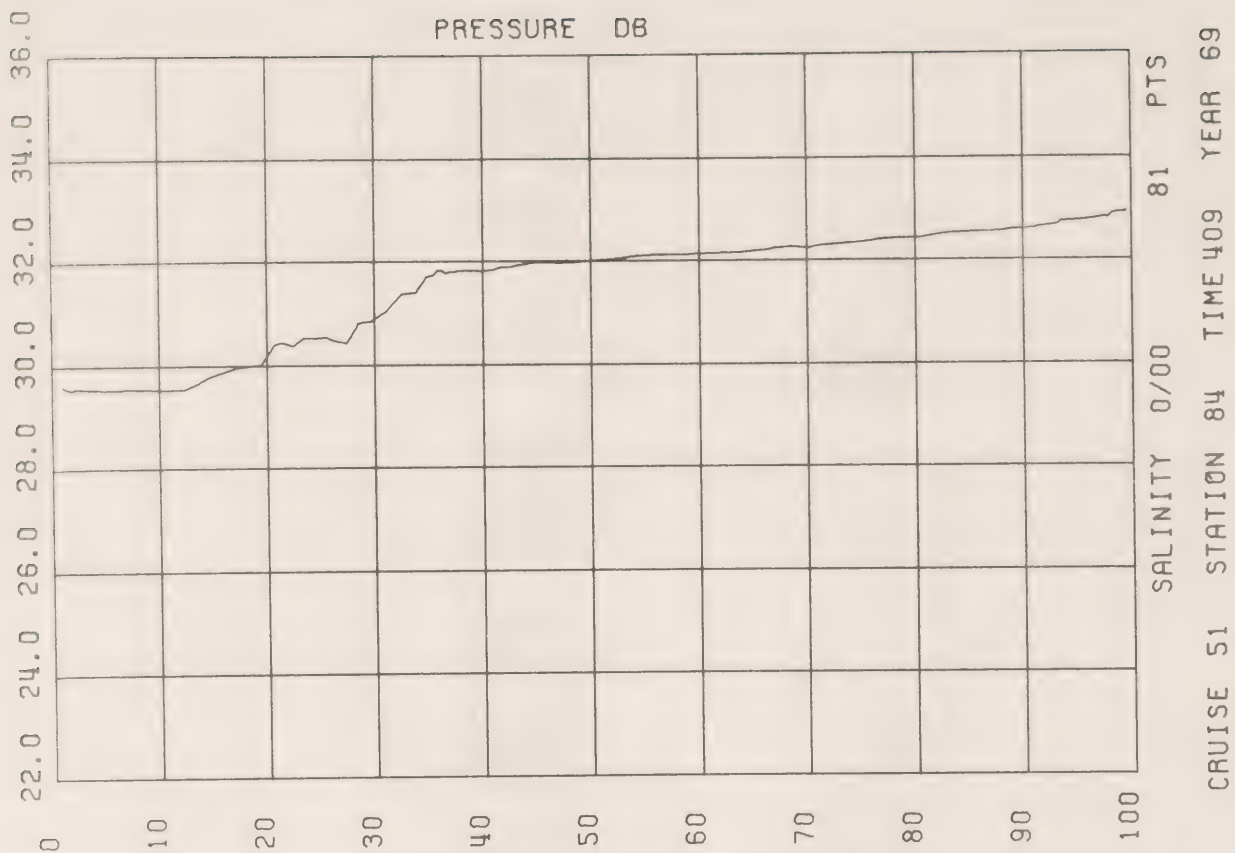
CRUISE NUMBER 69051 STATION NUMBER 083

LAT	N48	20.00	YEAR 1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 62	45.00	MONTH 9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		88.0	DAY 27	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M 0258	BARO	WET-BLB	UNAS	10H

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.233W	11.232	30.063W	2292	2292	1488.7W	41	2	4949
	20.0	20.2A	11.236W	11.234	30.065W	2292	2292	1488.9W	90	11	4951
	30.0	30.2	11.020	11.016	30.037	2294	2294	1488.3	140	23	4937
	50.0	50.4A	2.084A	2.082	31.611A	2527	2527	1454.8A	218	54	2706
	75.0	75.5A	0.981A	0.978	32.322A	2592	2592	1451.3A	277	91	2092

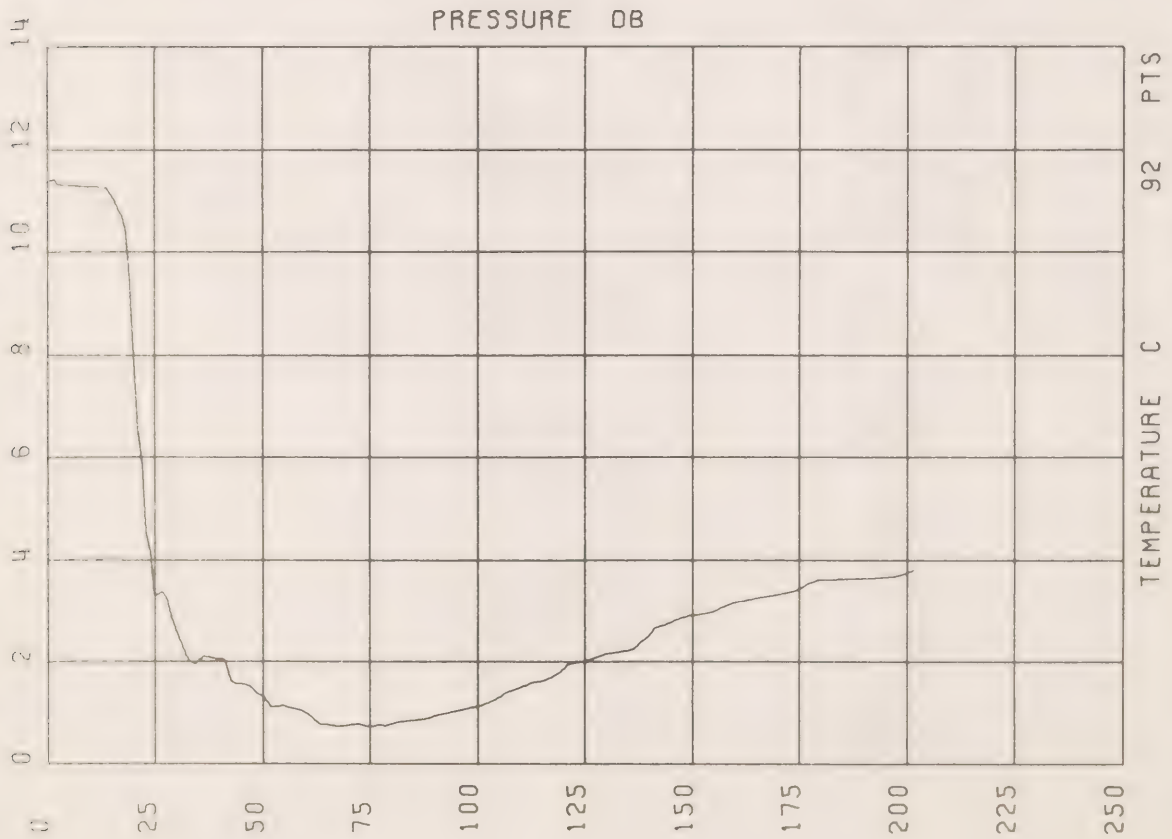
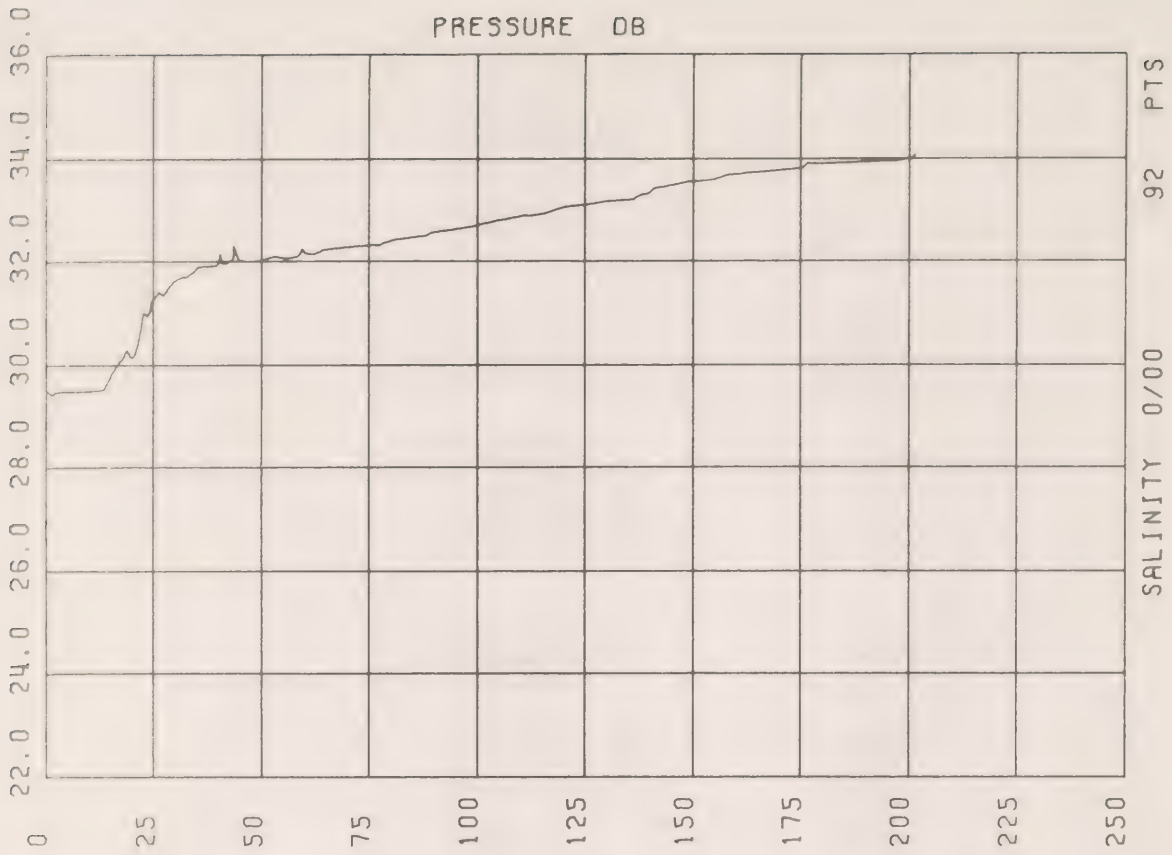


CRUISE NUMBER 69051 STATION NUMBER 084

LAT	N48 20.00	YEAR	1969	WAVE-P/H		WIND-DIR	040	WW	02	COUN	18
LONG	W 62 30.00	MONTH	9	SWEL-P/H	0503	WIND-SPD	17	CLD-A	8	INST	10
DEPTH	108.0	DAY	27	SWEL-D	050	AIR-TEM	12.7			RESTR	
MARSD	SQ	H/M	0410	BARO	1020.8	WET-BLB	10.0			UNAS	101

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	10.980W	10.979	29.529A	2255	2255	1487.1W	49	3	5304
	20.0	20.2A	10.826C	10.824	30.234W	2314	2314	1487.7W	100	11	4742
	30.0	30.2A	5.373C	5.371	30.885A	2440	2440	1467.6A	142	21	3543
	50.0	50.4A	1.466A	1.464	32.009A	2564	2564	1452.6A	195	43	2360
	75.0	75.5A	0.883A	0.880	32.355A	2595	2595	1450.9A	250	78	2060
	100.0	100.7W	1.662W	1.657	32.948W	2638	2638	1455.6W	298	121	1660

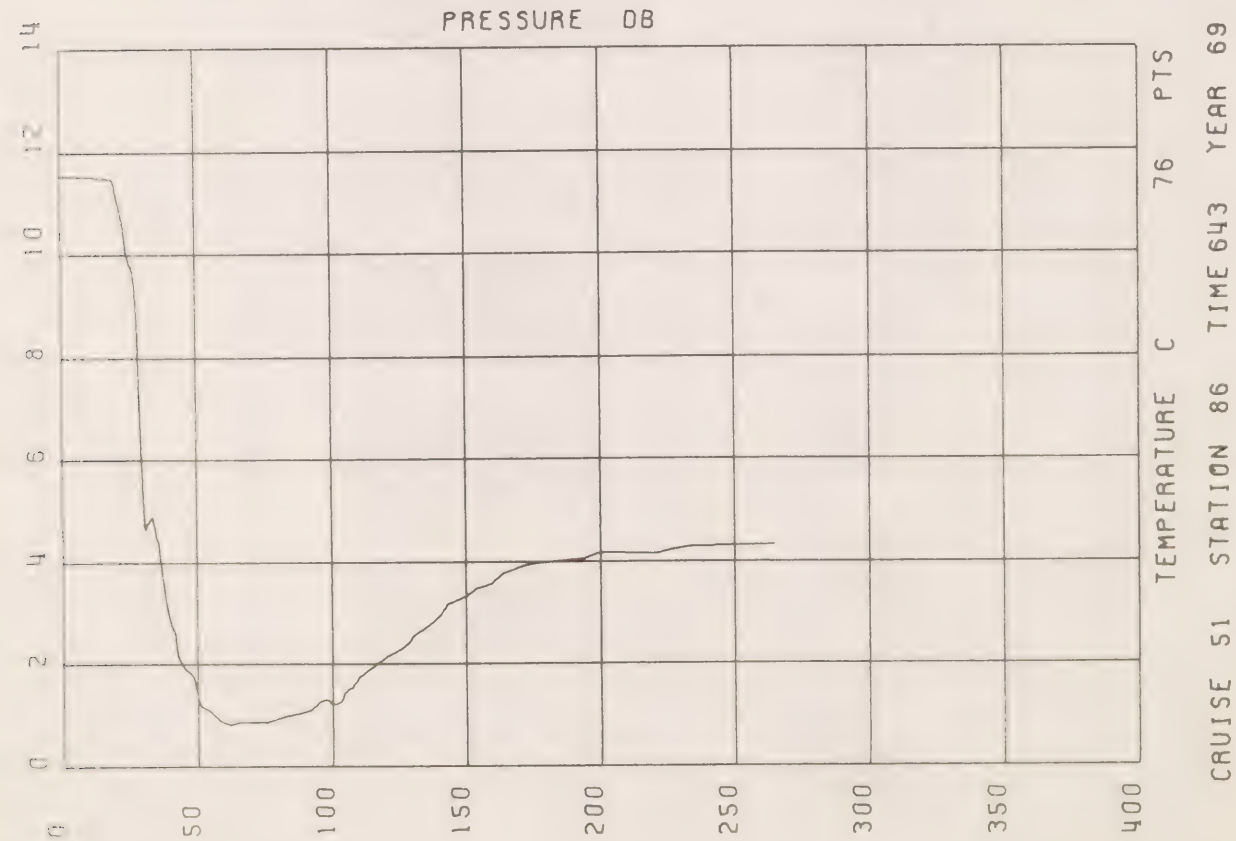
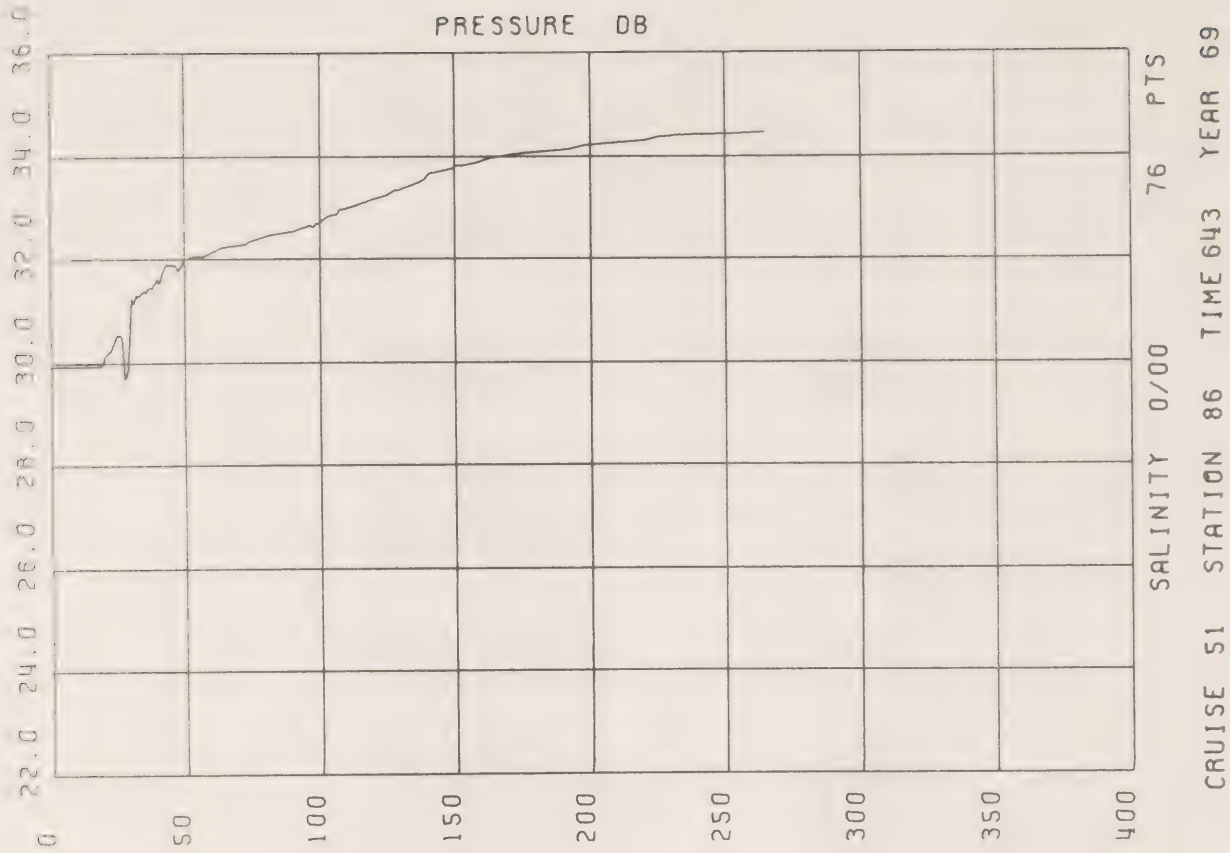


CRUISE NUMBER 69051 STATION NUMBER 085

LAT	N48	20.00	YEAR	1969	WAVE-P/H	0503	WIND-DIR	070	COUN	18
LONG	W 62	15.00	MONTH	9	SWEL-P/H	050	WIND-SPD	17	INST	10
DEPTH		216.0	DAY	27	SWEL-D	050	AIR-TEM	12.7	RESTR	
MARSD	SQ		H/M	0524	BARO	1020.5	WET-BLB	10.8	UNAS	10J

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.289A	11.288	29.478B	2246	2246	1488.2A	53	3	5393
	20.0	20.2A	7.538D	7.536	30.090A	2351	2351	1475.1A	104	10	4387
	30.0	30.2A	2.475B	2.473	31.670A	2530	2529	1456.2A	137	19	2685
	50.0	50.4A	1.288W	1.286	32.012B	2565	2565	1451.8W	186	39	2348
	75.0	75.5A	0.714A	0.711	32.325A	2594	2594	1450.1W	242	75	2075
	100.0	100.7A	1.118A	1.114	32.716A	2623	2623	1452.9A	290	118	1801
	125.0	125.9A	2.018A	2.011	33.106A	2648	2648	1457.8A	332	167	1566
	150.0	151.0A	2.915A	2.906	33.553A	2676	2676	1462.7A	369	217	1302
	175.0	176.2A	3.475A	3.463	33.858C	2695	2695	1466.0A	399	269	1124

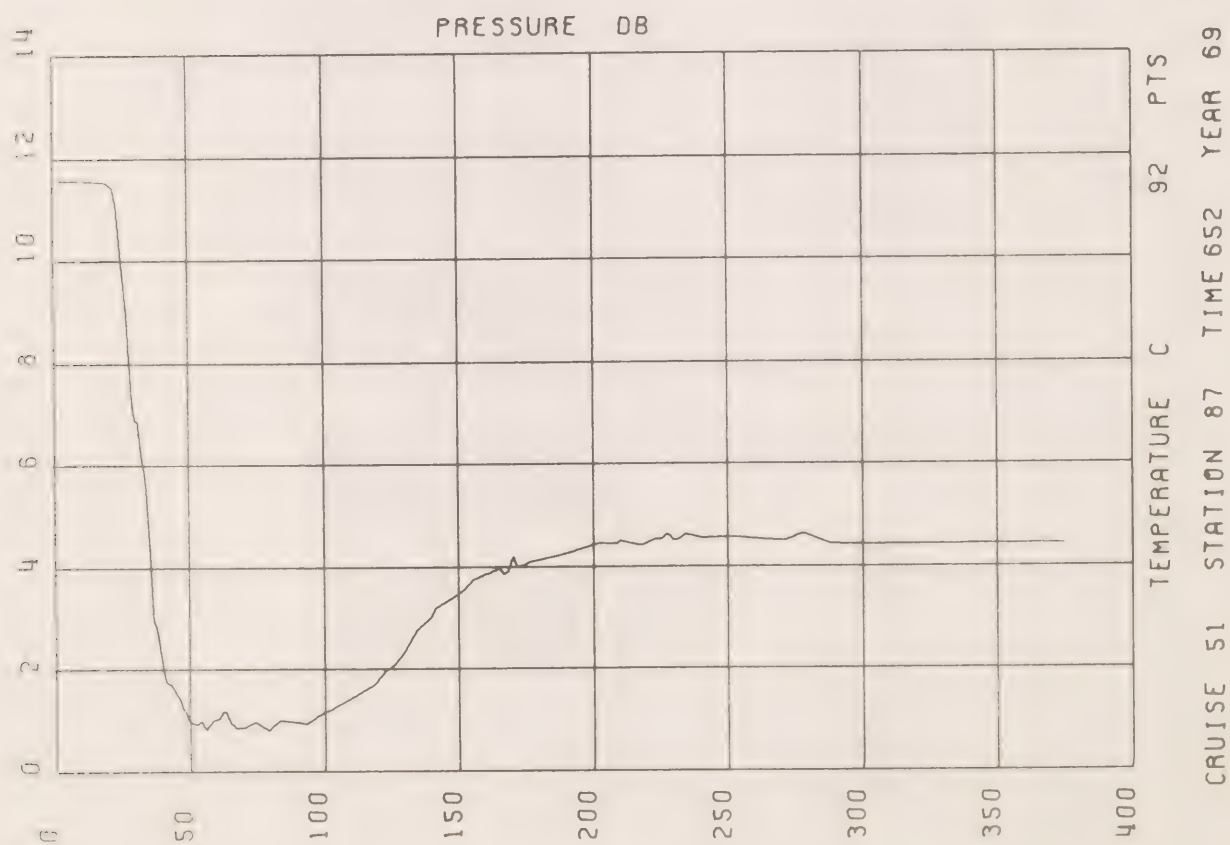
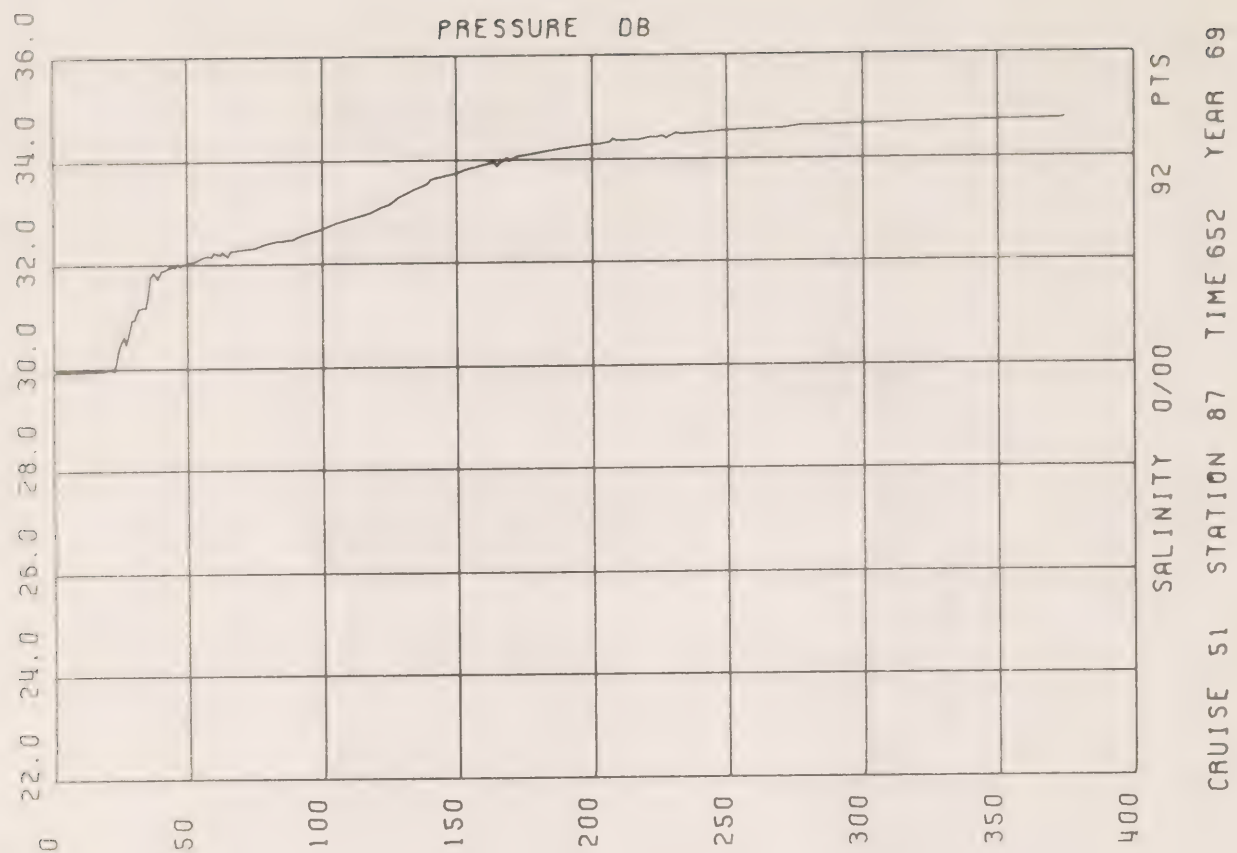


CRUISE NUMBER 69051 STATION NUMBER 086

LAT N48 20.00 YEAR 1969 WAVE-P/H WIND-DIR 100 WW 10 COUN 18
 LONG W 62 0.00 MONTH 9 SWEL-P/H 0503 WIND-SPD 18 CLD-A 8 INST 10
 DEPTH 272.0 DAY 27 SWEL-D 050 AIR-TEM 11.0 RESTR
 MARSD SQ H/M 0645 BARO 1020.5 WET-BLB 10.0 UNAS 10K

INTERPOLATED

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.538A	11.537	29.925A	2276	2276	1489.6W	51	2	5104
	20.0	20.2A	11.166A	11.164	30.121C	2298	2298	1488.7A	102	11	4899
	30.0	30.2	4.610	4.608	31.272	2479	2479	1464.9	147	22	3169
	50.0	50.4A	1.192B	1.190	32.012A	2565	2565	1451.4A	203	45	2340
	75.0	75.5A	0.860C	0.857	32.371A	2597	2597	1450.8A	258	80	2048
	100.0	100.7A	1.205W	1.201	32.718B	2622	2623	1453.2W	307	124	1804
	125.0	125.9A	2.313B	2.306	33.267B	2659	2659	1459.3A	347	170	1467
	150.0	151.0A	3.363B	3.353	33.829C	2693	2694	1465.0A	380	216	1136
	175.0	176.2A	3.967B	3.955	34.066A	2707	2707	1468.3A	407	262	1016
	200.0	201.4A	4.181A	4.166	34.228A	2717	2718	1469.9A	431	308	919
	225.0	226.6A	4.217A	4.201	34.377A	2729	2729	1470.6A	453	357	813
	250.0	251.8W	4.310W	4.291	34.429W	2732	2732	1471.5W	473	406	787



CRUISE NUMBER 69051 STATION NUMBER 087

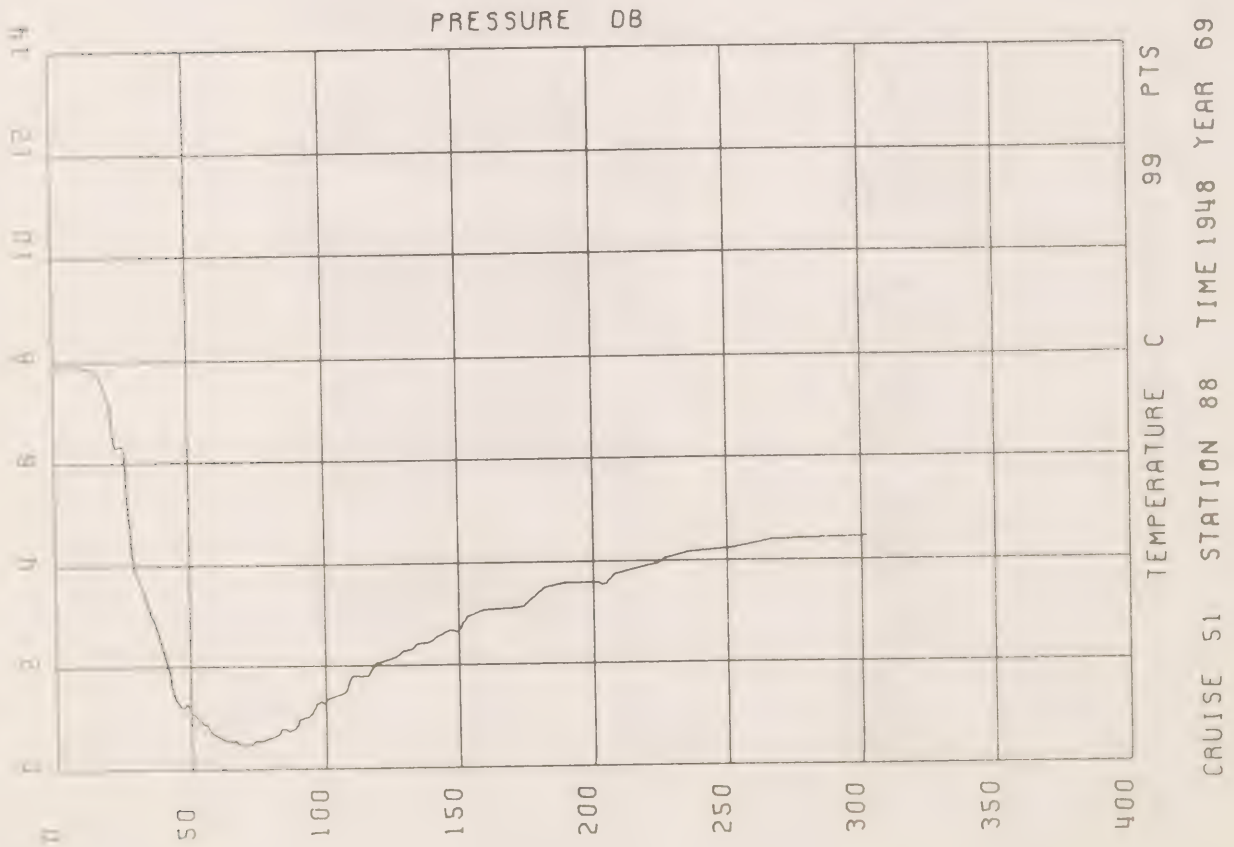
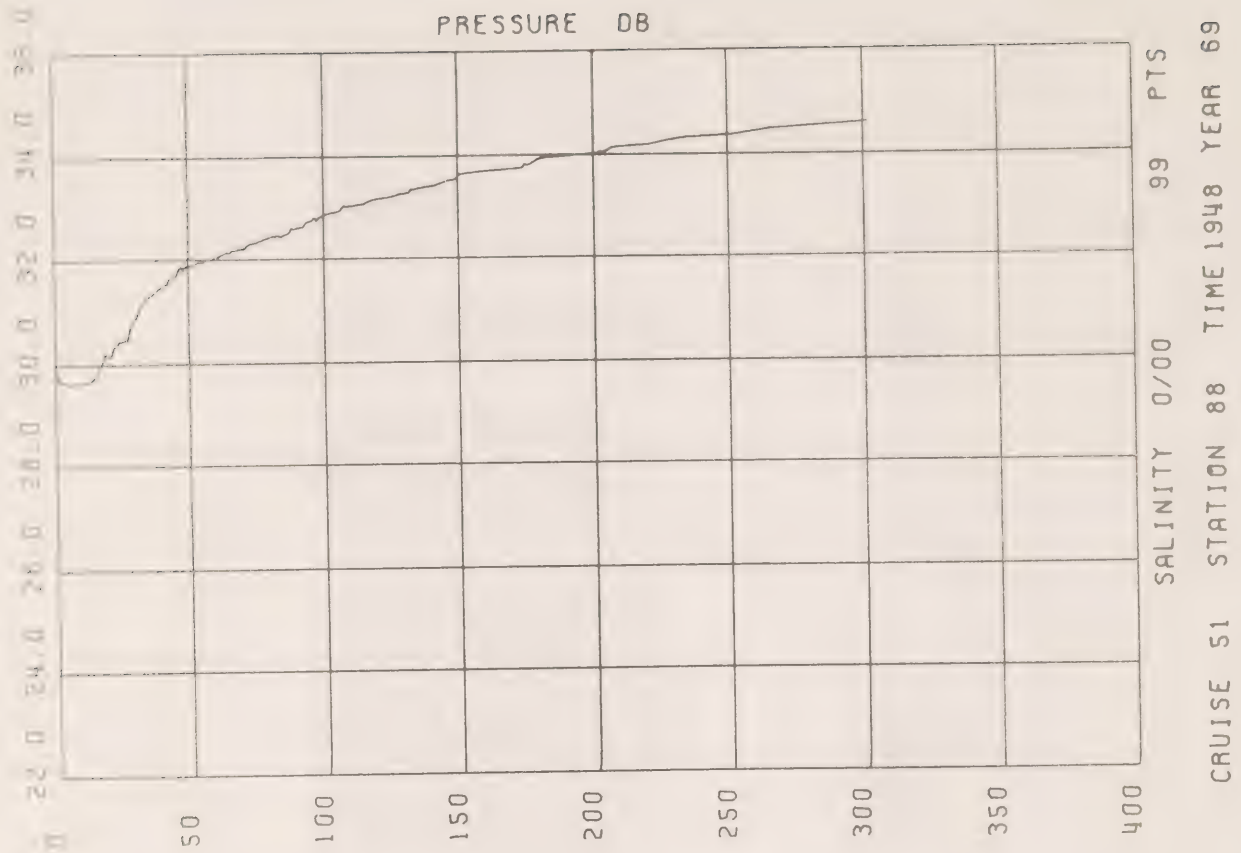
LAT	N48	20.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 61	45.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		380.0	DAY	27	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	0805	BARO	WET-BLB	UNAS	10L

COUN	18
INST	10
RESTR	
UNAS	10L

WW	CLD-A
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I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.580A	11.579	29.927A	2276	2276	1489.8W	46	2	5109
	20.0	20.2A	11.526E	11.523	29.962C	2279	2279	1489.7W	97	10	5077
	30.0	30.2A	6.928B	6.925	30.960C	2428	2428	1473.9A	142	22	3660
	50.0	50.4A	0.944W	0.942	32.030A	2568	2568	1450.3A	196	44	2312
	75.0	75.5	0.910	0.907	32.318	2592	2592	1451.0	251	79	2091
	100.0	100.7A	1.161A	1.157	32.688A	2621	2621	1453.0A	301	123	1824
	125.0	125.9A	2.091A	2.084	33.159A	2651	2651	1458.2A	343	172	1532
	150.0	151.0A	3.504A	3.494	33.748A	2686	2687	1465.6A	377	219	1208
	175.0	176.2A	4.085A	4.073	34.088A	2708	2708	1468.9A	404	265	1011
	200.0	201.4A	4.444A	4.429	34.282A	2719	2719	1471.1A	429	311	907
	225.0	226.6A	4.642A	4.625	34.436A	2729	2730	1472.5W	450	358	816
	250.0	251.8A	4.579A	4.560	34.541A	2738	2738	1472.8A	469	405	733
	300.0	302.2A	4.420A	4.397	34.651A	2749	2749	1473.1A	504	503	638



CRUISE NUMBER 69051 STATION NUMBER 088

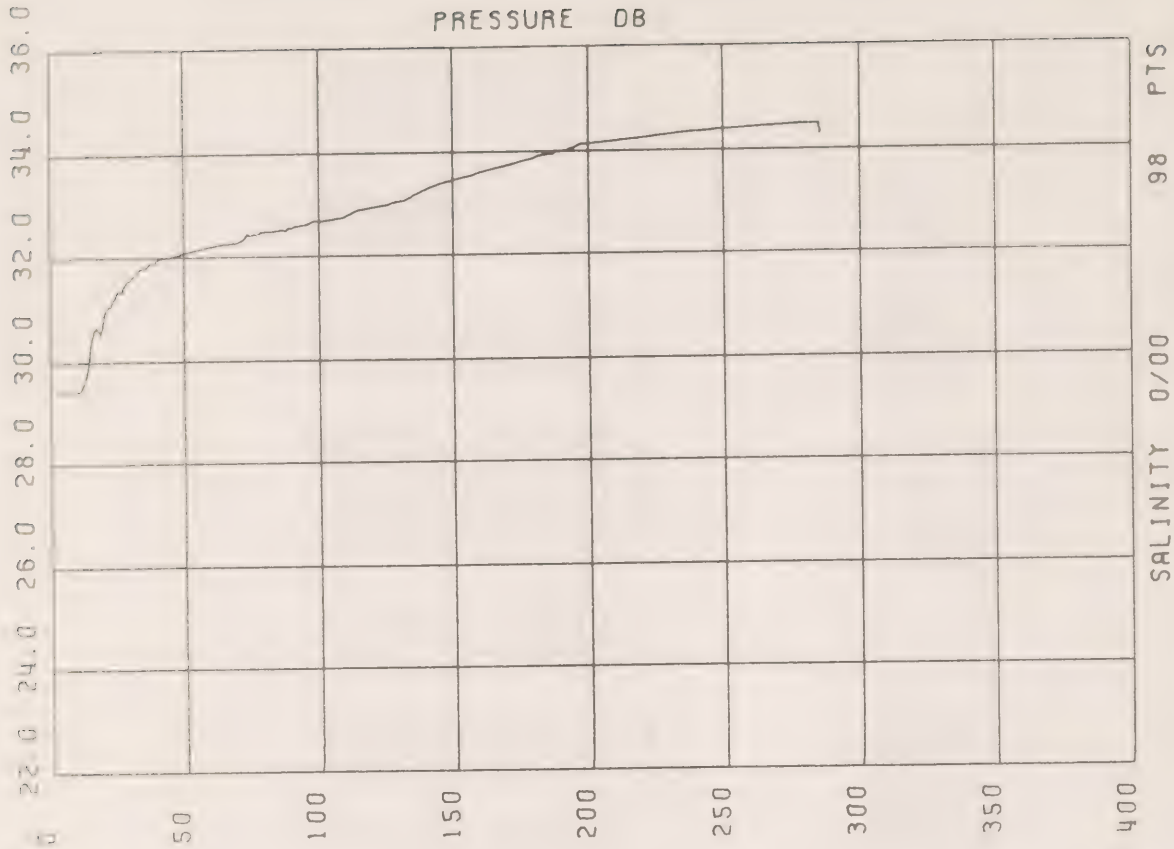
LAT	N49	30.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	30.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		308.0	DAY	27	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	1948	BARO	WET-BLB	UNAS	03A

WW
CLD-A

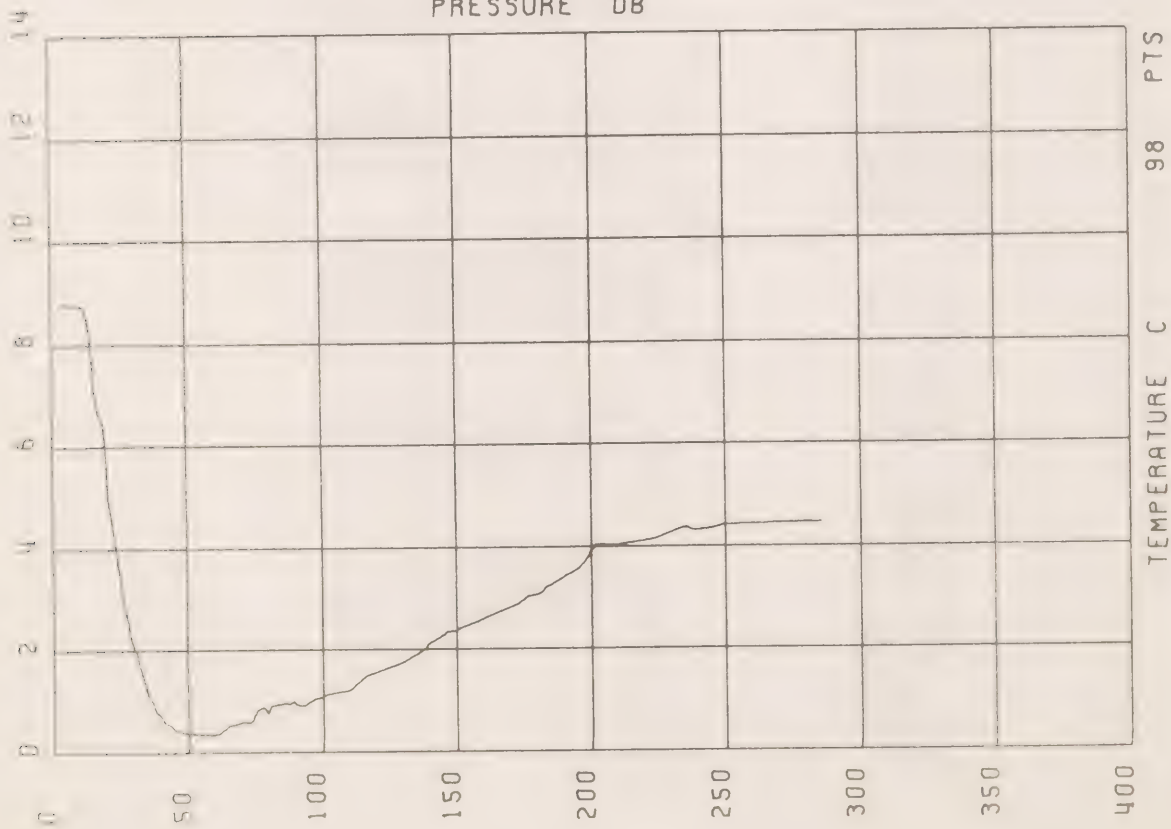
INTERPOLATED

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	7.906B	7.905	29.610B	2308	2308	1475.7W	45	2	4792
	20.0	20.2A	7.167C	7.165	30.117A	2358	2358	1473.6A	91	10	4319
	30.0	30.2A	3.749A	3.747	30.891A	2457	2457	1460.8A	130	19	3377
	50.0	50.4A	1.075W	1.073	31.879A	2556	2556	1450.7W	186	42	2435
	75.0	75.5A	0.516B	0.513	32.333B	2596	2596	1449.3W	243	78	2058
	100.0	100.7A	1.358A	1.353	32.869A	2633	2633	1454.1A	290	121	1698
	125.0	125.9	2.140	2.133	33.208	2655	2655	1458.5	331	167	1497
	150.0	151.0	2.780	2.771	33.635	2684	2684	1462.3	365	216	1228
	175.0	176.2A	3.234A	3.223	33.797A	2692	2692	1464.9A	396	267	1148
	200.0	201.4A	3.596A	3.582	34.008A	2706	2706	1467.1A	423	318	1025
	225.0	226.6A	4.036A	4.020	34.251A	2721	2721	1469.7A	446	369	889
	250.0	251.8A	4.219A	4.201	34.362A	2728	2728	1471.0A	468	422	827
	300.0	302.2W	4.450W	4.427	34.601W	2744	2745	1473.1W	505	527	678

PRESSURE DB

CRUISE 51 STATION 89 TIME 2022 YEAR 69
SALINITY 0/00 98 PTS

PRESSURE DB

CRUISE 51 STATION 89 TIME 2022 YEAR 69
TEMPERATURE C 98 PTS

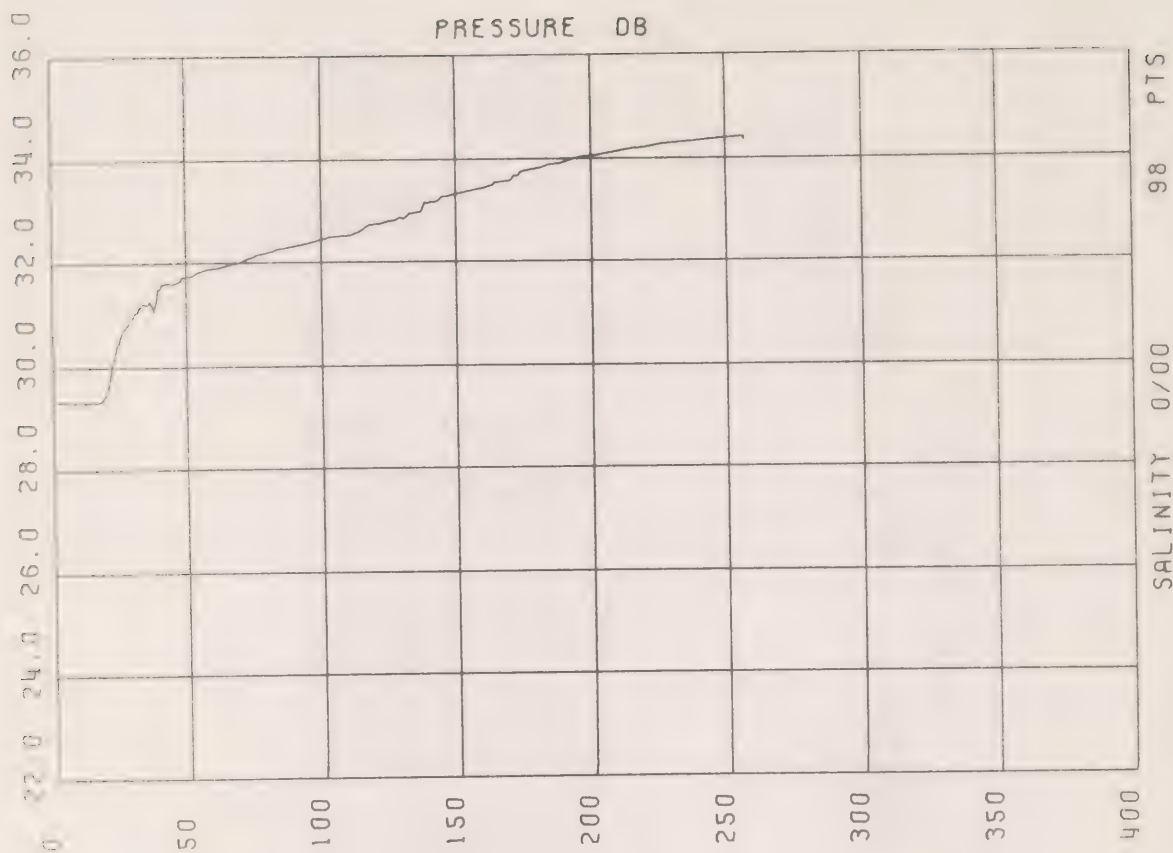
CRUISE NUMBER 69051 STATION NUMBER 089

LAT	N49	30.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	15.00	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		294.0	DAY	27	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	2121	BARO	WET-BLB	UNAS	03B

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.746B	8.745	29.431W	2283	2283	1478.7W	38	2	5037
	20.0	20.2	4.970	4.969	30.927	2448	2448	1465.8	81	9	3465
	30.0	30.2A	2.003B	2.002	31.573A	2526	2526	1454.1A	112	17	2726
	50.0	50.4A	0.375C	0.373	32.088A	2577	2577	1447.8W	160	37	2238
	75.0	75.5A	0.857A	0.854	32.418C	2600	2600	1450.8A	214	71	2008
	100.0	100.7A	1.105A	1.101	32.678A	2619	2619	1452.7A	262	114	1828
	125.0	125.9A	1.661A	1.655	32.992A	2642	2642	1456.1A	306	164	1626
	150.0	151.0A	2.405A	2.397	33.462A	2673	2674	1460.4A	343	217	1327
	175.0	176.2A	3.034C	3.023	33.816A	2696	2697	1464.0A	374	267	1115
	200.0	201.4A	4.030W	4.016	34.136A	2712	2712	1469.1W	400	317	973
	225.0	226.6A	4.213A	4.197	34.284A	2721	2722	1470.5A	423	368	882
	250.0	251.8A	4.411A	4.392	34.401A	2729	2729	1471.9A	444	420	819

PRESSURE DB

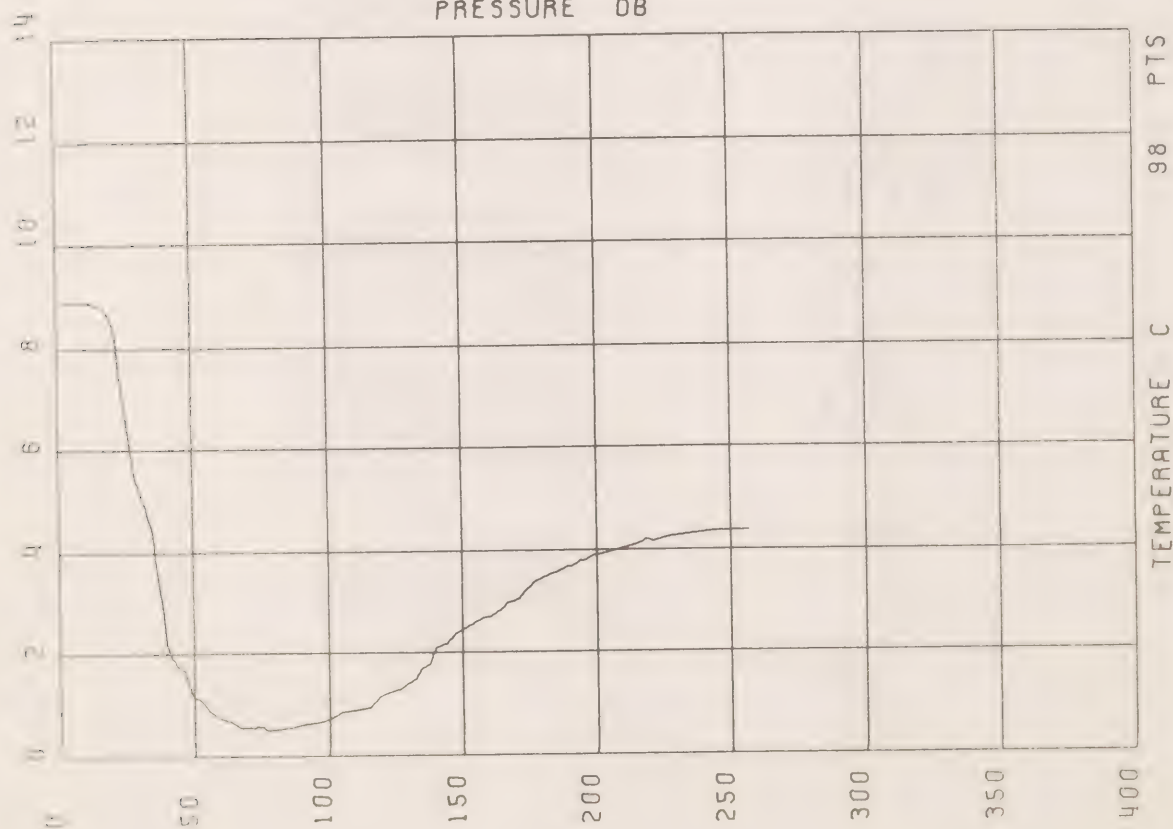


SALINITY 0/00

PTS

CRUISE 51 STATION 90 TIME 2132 YEAR 69

PRESSURE DB



TEMPERATURE C

PTS

CRUISE 51 STATION 90 TIME 2132 YEAR 69

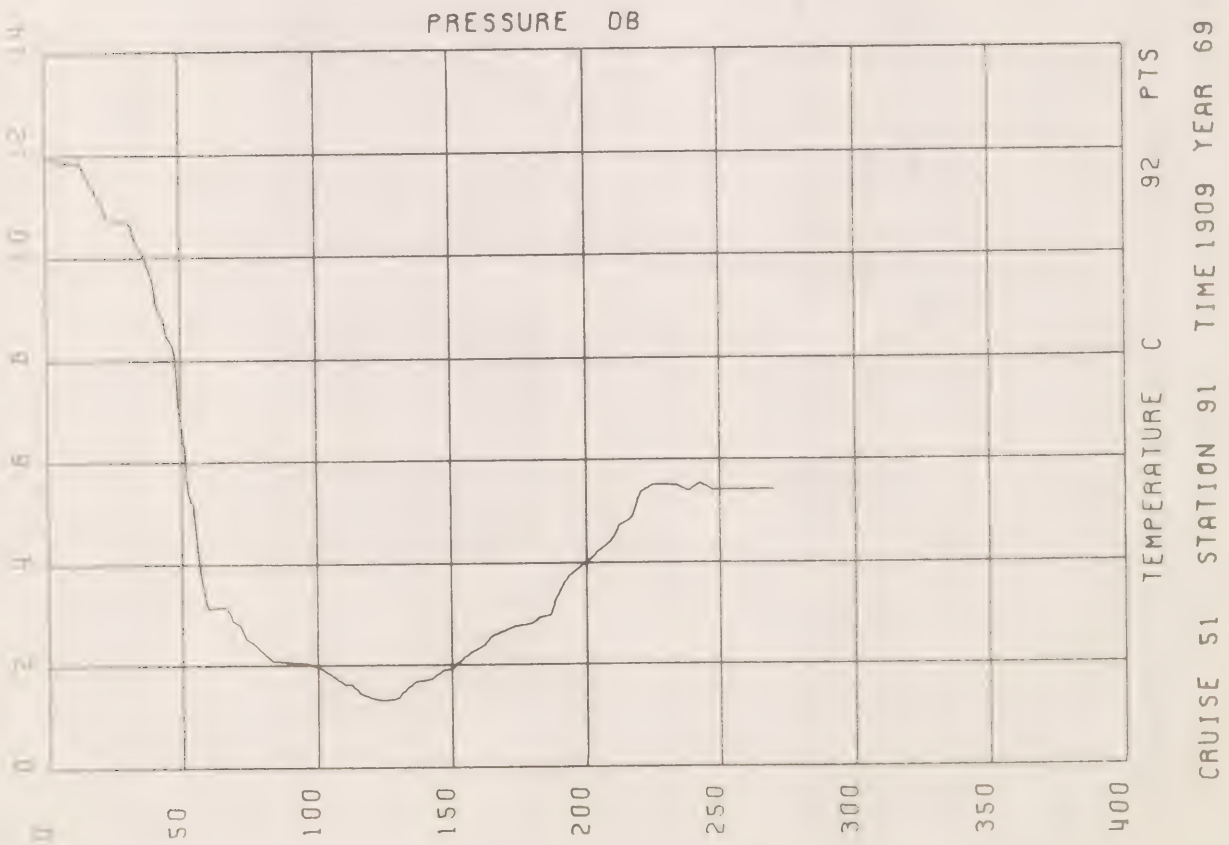
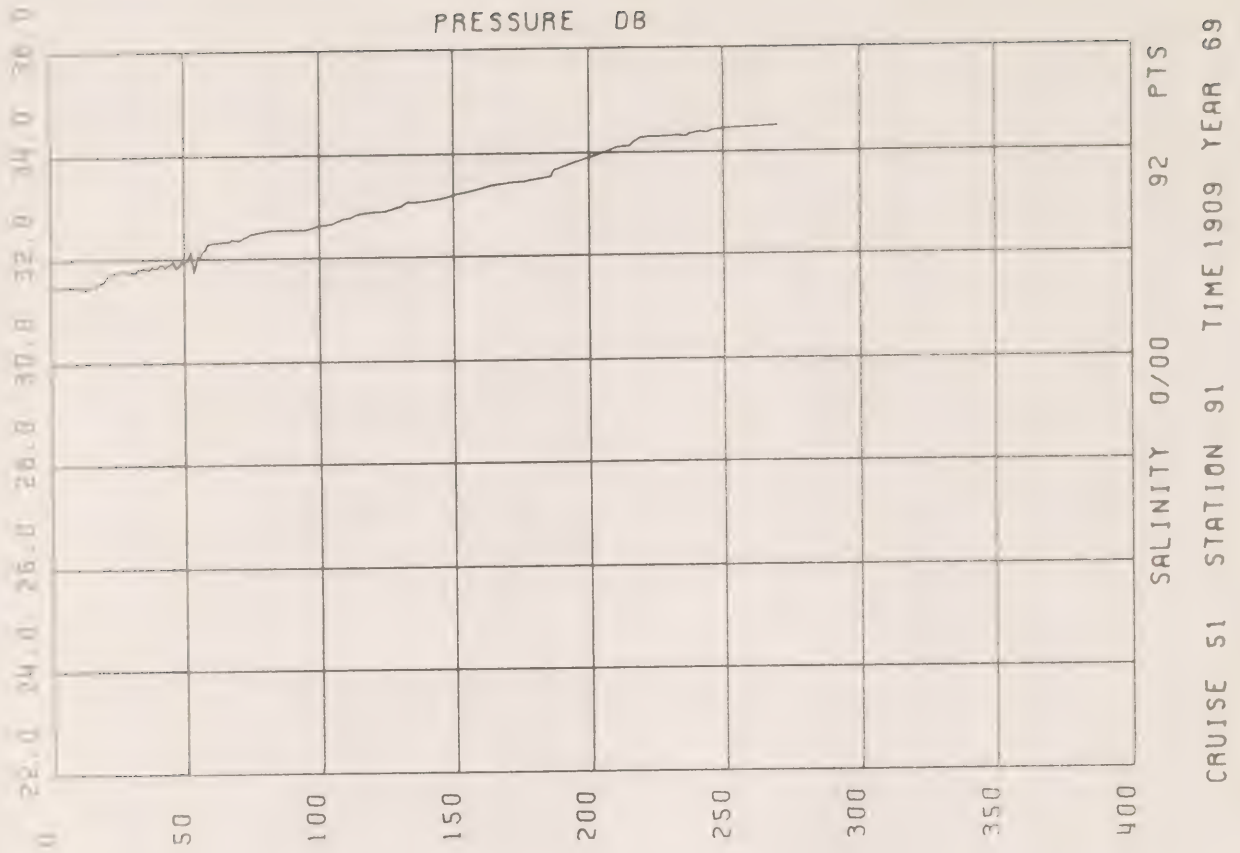
LAT N49 30.00 YEAR 1969 WAVE-P/H WIND-DIR COUN 18
 LONG W 64 0.00 MONTH 9 WIND-P/H WIND-SPD INST 10
 DEPTH 260.0 DAY 27 SWEL-D SWEL-TEM AIR-TEM RESTR
 MARSQ SQ H/M 2244 BARO WET-BLB UNAS 03C

CRUISE NUMBER 69051 STATION NUMBER 090

COUN 18
 INST 10
 RESTR
 UNAS 03C

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEDA	CHI	SVA
	10.0	10.1A	8.907W	8.908	29.297A	2270	2270	1479.2W	46	2	5162
	20.0	20.2A	8.446C	8.444	29.485C	2292	2292	1477.8A	99	11	4958
	30.0	30.2A	5.096A	5.094	30.972A	2450	2450	1466.5A	138	21	3443
	50.0	50.4A	1.153A	1.151	31.744A	2544	2544	1450.9W	197	44	2542
	75.0	75.5A	0.524A	0.521	32.120A	2578	2578	1448.9A	256	82	2221
	100.0	100.7A	0.731A	0.727	32.456A	2604	2604	1450.8A	309	130	1975
	125.0	125.9A	1.276A	1.270	32.803A	2629	2629	1454.1A	356	184	1744
	150.0	151.0A	2.481A	2.473	33.336A	2663	2663	1460.5A	396	241	1429
	175.0	176.2A	3.355A	3.344	33.765A	2689	2689	1465.4A	430	297	1183
	200.0	201.4A	3.903A	3.889	34.048A	2706	2706	1468.4A	457	350	1026
	225.0	226.6A	4.232A	4.215	34.268A	2720	2720	1470.5A	482	402	897
	250.0	251.8W	4.360W	4.341	34.390W	2729	2729	1471.7W	503	455	821



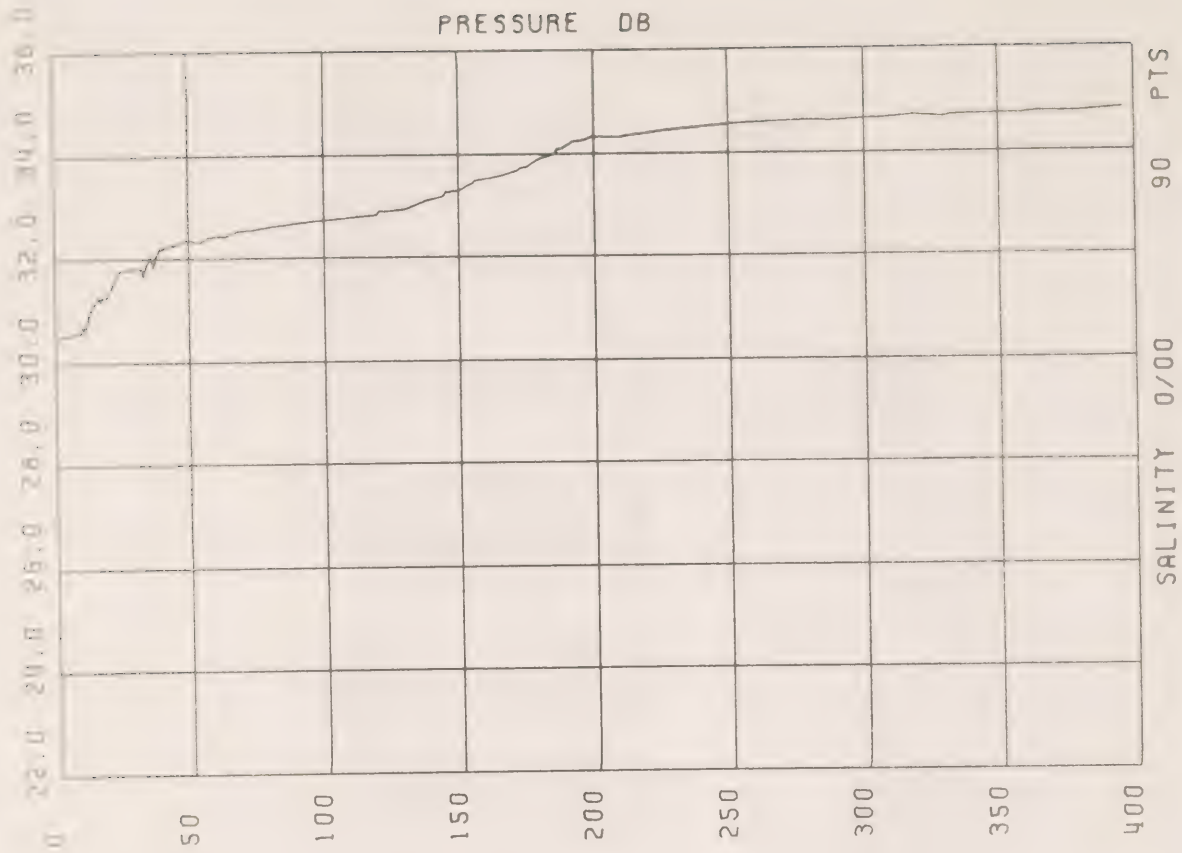
CRUISE NUMBER 69051 STATION NUMBER 091

LAT	N47	4.40	YEAR	1969	WAVE-P/H	0301	WIND-DIR	330	WW	01	COUN	18
LONG	W 60	18.70	MONTH	9	SWEL-P/H	0603	WIND-SPD	08	CLD-A	7	INST	10
DEPTH		275.0	DAY	29	SWEL-D	160	AIR-TEM	12.2			RESTR	
MARSD	SQ		H/M	1857	BARO	1007.8	WET-BLB	11.0			UNAS	CS09

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	11.869W	11.868	31.463A	2389	2389	1492.7W	37	2	4023
	20.0	20.2	11.140	11.138	31.589	2412	2412	1490.5	77	8	3808
	30.0	30.2A	10.716D	10.712	31.774B	2434	2434	1489.3W	113	18	3603
	50.0	50.4A	6.350C	6.346	32.002B	2517	2517	1473.4A	180	44	2814
	75.0	75.5A	2.464B	2.460	32.488A	2595	2595	1458.0W	238	82	2066
	100.0	100.7A	1.954A	1.949	32.631A	2610	2610	1456.5A	288	126	1920
	125.0	125.9A	1.307W	1.293	32.910B	2637	2637	1454.3A	333	178	1667
	150.0	151.0A	2.005A	1.997	33.212A	2656	2656	1458.3A	372	233	1485
	175.0	176.2A	2.759A	2.749	33.448A	2669	2669	1462.3A	408	293	1368
	200.0	201.4	4.050	4.036	33.919	2694	2695	1468.9	440	354	1137
	225.0	226.6	5.530	5.511	34.304	2708	2709	1475.9	467	412	1016
	250.0	251.8W	5.420W	5.399	34.454W	2721	2722	1476.1W	491	472	895

PRESSURE DB

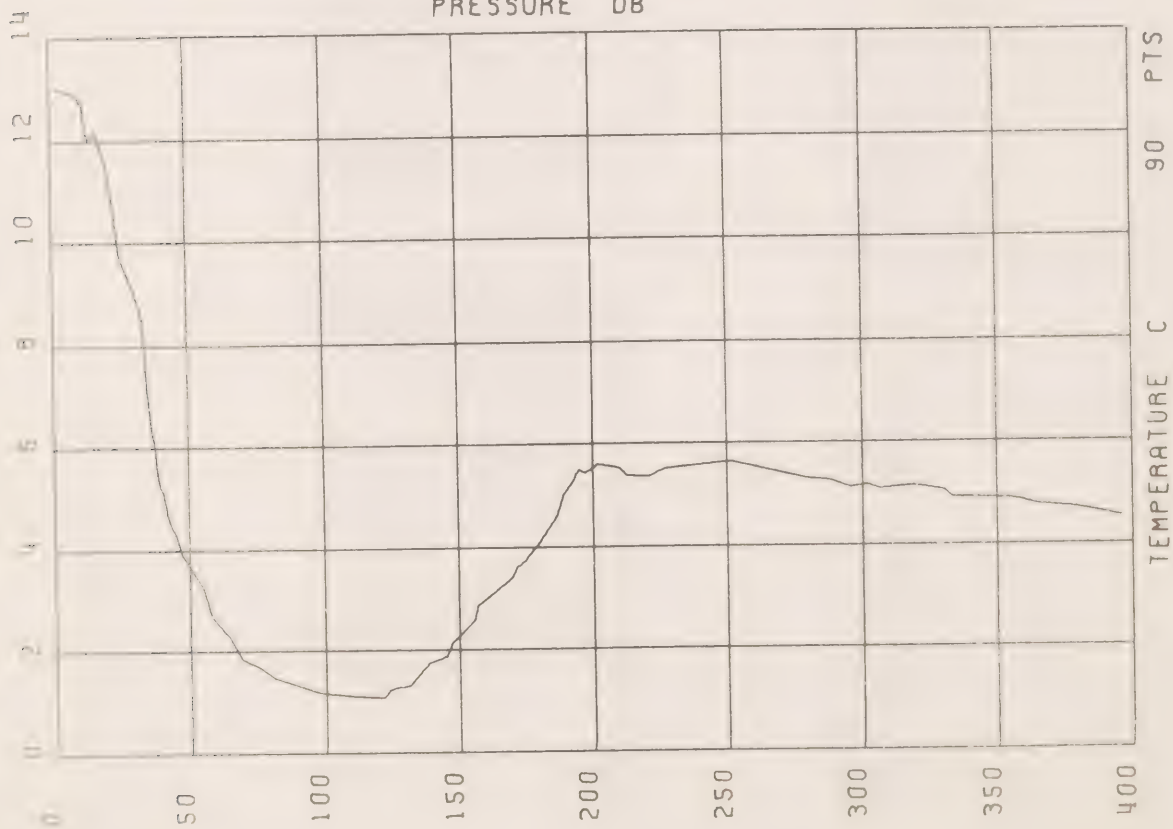


SALINITY 0/00

PTS

CRUISE 51 STATION 92 TIME 1921 YEAR 69

PRESSURE DB



TEMPERATURE C

PTS

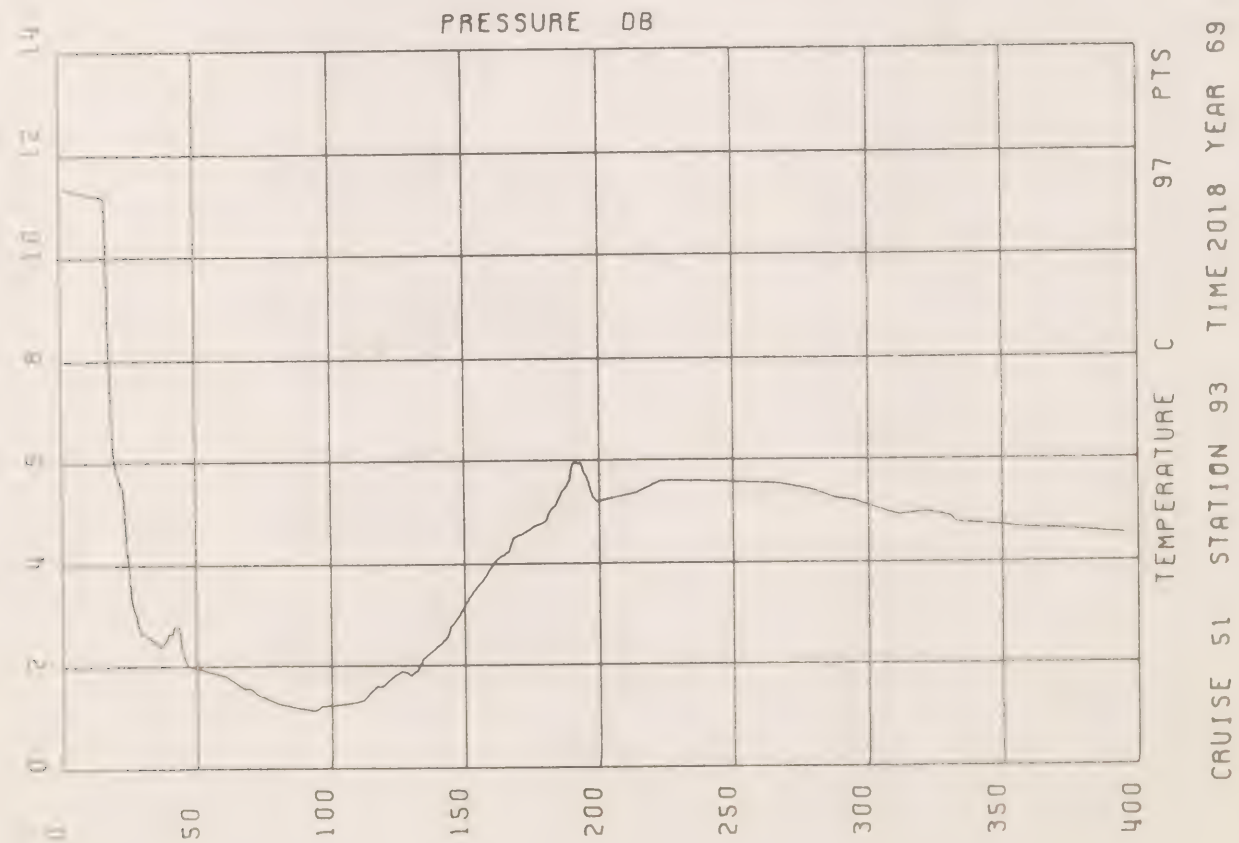
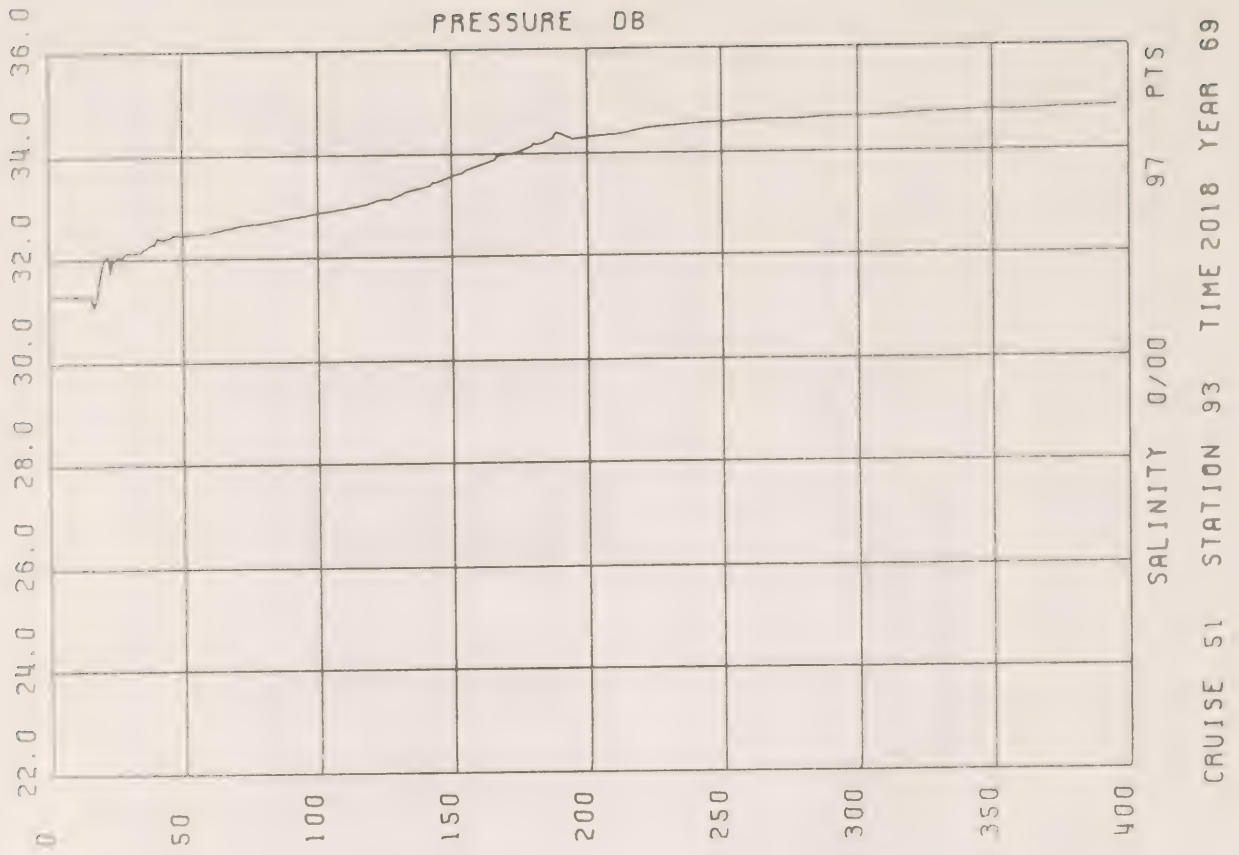
CRUISE 51 STATION 92 TIME 1921 YEAR 69

CRUISE NUMBER 69051 STATION NUMBER 092

LAT N47 7.20
 LONG W 60 13.80
 DEPTH 412.0
 MARSD SQ
 YEAR 1969
 MONTH 9
 DAY 29
 H/M 1939
 WAVE-P/H
 SWEL-P/H
 SWEL-D
 BARO
 WIND-DIR
 WIND-SPD
 AIR-TEM
 WET-BLB
 W/W
 CLD-A
 COUN 18
 INST 10
 RESTR
 UNAS CS08

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	12.851C	12.850	30.611C	2305	2305	1495.1A	42	2	4827
	20.0	20.2A	11.545A	11.543	31.324C	2383	2383	1491.5A	87	9	4082
	30.0	30.2A	9.014B	9.011	31.825A	2465	2465	1483.1A	121	18	3300
	50.0	50.4A	3.595A	3.592	32.378B	2576	2576	1462.5A	175	40	2241
	75.0	75.5A	1.679A	1.675	32.569A	2607	2607	1454.7A	227	73	1949
	100.0	100.7	1.160	1.156	32.736	2624	2624	1453.1	274	115	1788
	125.0	125.9A	1.252A	1.246	32.912A	2637	2637	1454.1A	318	165	1660
	150.0	151.0A	2.326A	2.318	33.314A	2662	2662	1459.9A	356	221	1433
	175.0	176.2A	3.829A	3.817	33.767A	2685	2685	1467.4A	390	276	1228
	200.0	201.4A	5.623A	5.606	34.327A	2709	2709	1475.9A	417	328	1007
	225.0	226.6A	5.502W	5.483	34.446A	2720	2720	1476.0A	441	381	907
	250.0	251.8A	5.646A	5.624	34.568A	2728	2728	1477.2A	463	435	837
	300.0	302.2A	5.185A	5.160	34.655A	2740	2740	1476.3A	502	544	723
	400.0	403.0W	4.530W	4.499	34.833W	2762	2762	1475.4W	567	773	525



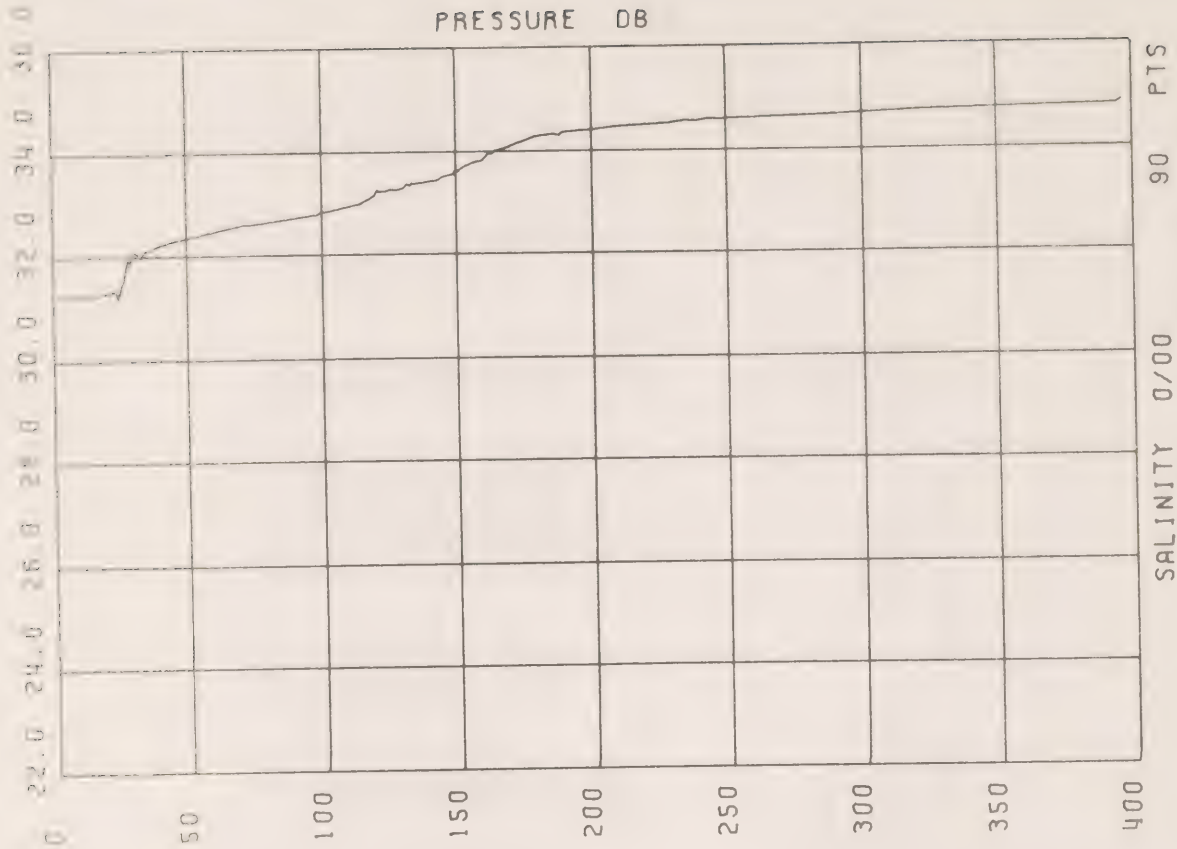
CRUISE NUMBER 69051 STATION NUMBER 093

LAT N47 12.20
 LONG W 60 4.50
 DEPTH 480.0
 MARSQ SQ
 YEAR 1969
 MONTH 9
 DAY 29
 H/M 2022
 WAVE-P/H
 SWEL-P/H
 SWEL-D
 BARO
 WIND-DIR
 WIND-SPD
 AIR-TEM
 WET-BLB
 W W
 CLD-A
 COUN 18
 INST 10
 RESTR
 UNAS CS07

I N T E R P O L A T E D

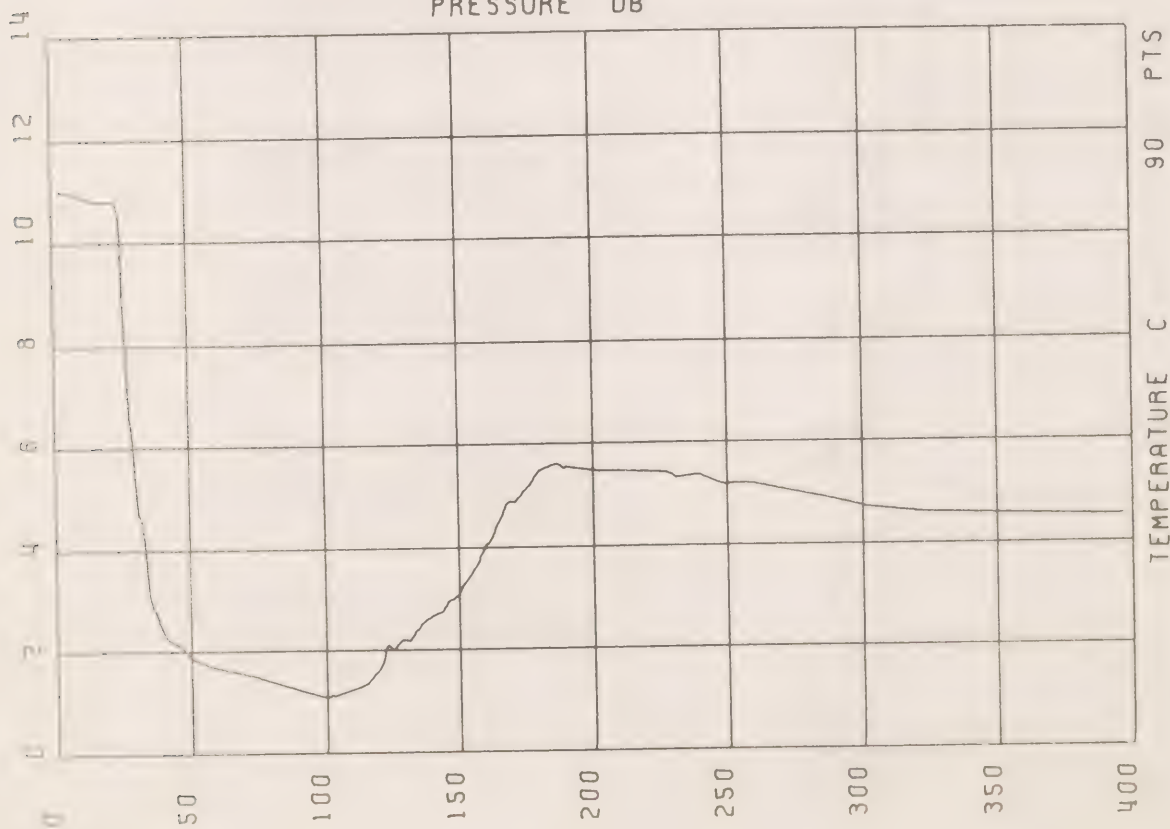
GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEDA	CHI	SVA
	10.0	10.1A	11.259A	11.258	31.289A	2387	2387	1490.4A	36	2	4048
	20.0	20.2A	5.829C	5.827	31.943A	2520	2520	1470.7A	74	8	2788
	30.0	30.2A	2.619D	2.617	32.156D	2566	2566	1457.5A	100	15	2329
	50.0	50.4A	1.957A	1.955	32.468A	2597	2597	1455.5A	144	32	2043
	75.0	75.5A	1.385A	1.382	32.670A	2617	2617	1453.5A	193	64	1852
	100.0	100.7A	1.221A	1.217	32.883A	2635	2635	1453.5A	238	104	1679
	125.0	125.9A	1.904A	1.898	33.142A	2652	2652	1457.3W	278	150	1531
	150.0	151.0	3.300	3.290	33.583	2675	2675	1464.4	314	201	1313
	175.0	176.2A	4.718A	4.705	34.052A	2698	2698	1471.5A	345	252	1106
	200.0	201.4A	5.221A	5.205	34.300A	2712	2712	1474.3A	370	302	980
	225.0	226.6A	5.631A	5.612	34.495A	2722	2722	1476.5W	394	353	887
	250.0	251.8A	5.580A	5.559	34.576A	2729	2729	1476.9W	416	405	822
	300.0	302.2A	5.062A	5.038	34.665A	2742	2743	1475.7A	454	515	700
	400.0	403.0W	4.519W	4.488	34.847W	2763	2763	1475.4W	514	730	514

PRESSURE DB



CRUISE 51 STATION 94 TIME 2041 YEAR 69
SALINITY 0/00 90 PTS

PRESSURE DB



CRUISE 51 STATION 94 TIME 2041 YEAR 69
TEMPERATURE C 90 PTS

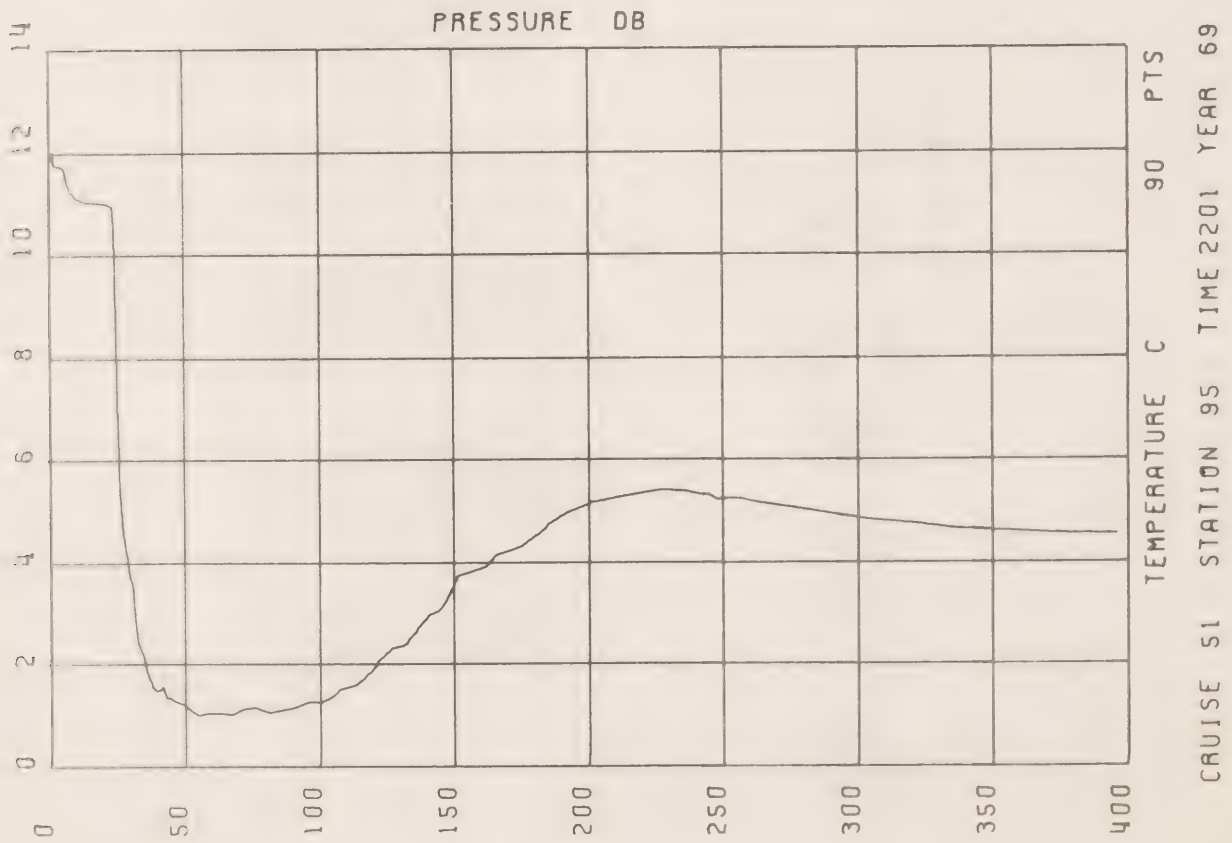
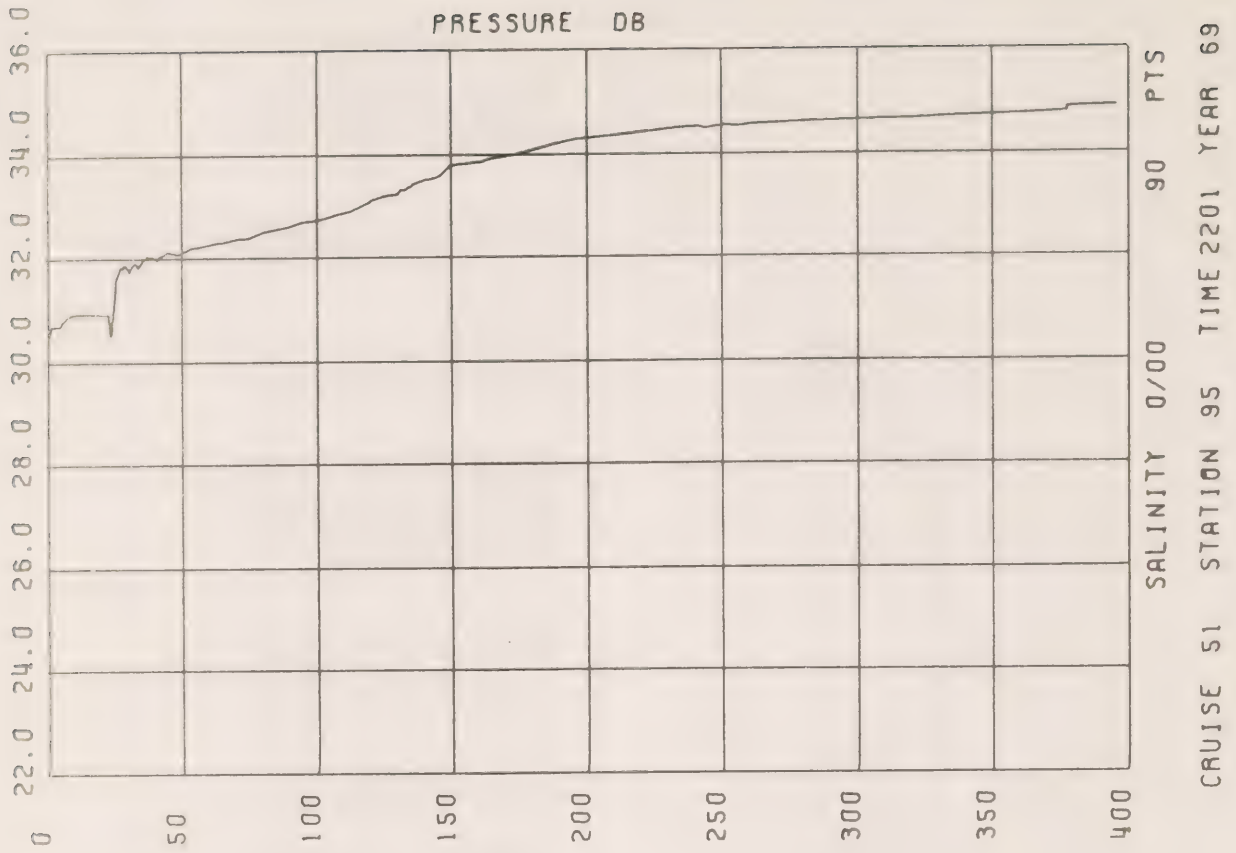
CRUISE NUMBER 69051 STATION NUMBER 094

LAT	N47	17.20	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 59	55.20	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		488.0	DAY	29	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	2111	BARO	WET-BLB	UNAS	CS06

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	10.907A	10.906	31.236A	2389	2389	1489.0W	32	2	4027
	20.0	20.2A	10.840A	10.838	31.306A	2395	2395	1489.0W	72	8	3967
	30.0	30.2A	4.843C	4.841	32.099B	2542	2542	1467.0A	107	17	2571
	50.0	50.4A	1.851A	1.849	32.359A	2589	2589	1454.8A	153	36	2119
	75.0	75.5A	1.469W	1.466	32.613A	2613	2613	1453.9A	203	68	1901
	100.0	100.7A	1.096W	1.092	32.847A	2633	2633	1452.9W	249	109	1700
	125.0	125.9	2.080	2.073	33.263	2660	2660	1458.3	289	155	1452
	150.0	151.0A	3.238A	3.228	33.609A	2678	2678	1464.2A	324	204	1288
	175.0	176.2A	5.185A	5.171	34.216A	2705	2705	1473.6A	353	252	1036
	200.0	201.4A	5.480W	5.463	34.407A	2717	2717	1475.5W	378	300	930
	225.0	226.6A	5.441A	5.422	34.513A	2726	2726	1475.9A	400	348	850
	250.0	251.8A	5.210W	5.189	34.596A	2735	2735	1475.4A	420	397	763
	300.0	302.2A	4.725A	4.701	34.685A	2748	2748	1474.4A	456	498	647
	400.0	403.1W	4.540W	4.509	34.815W	2760	2761	1475.4W	514	707	539

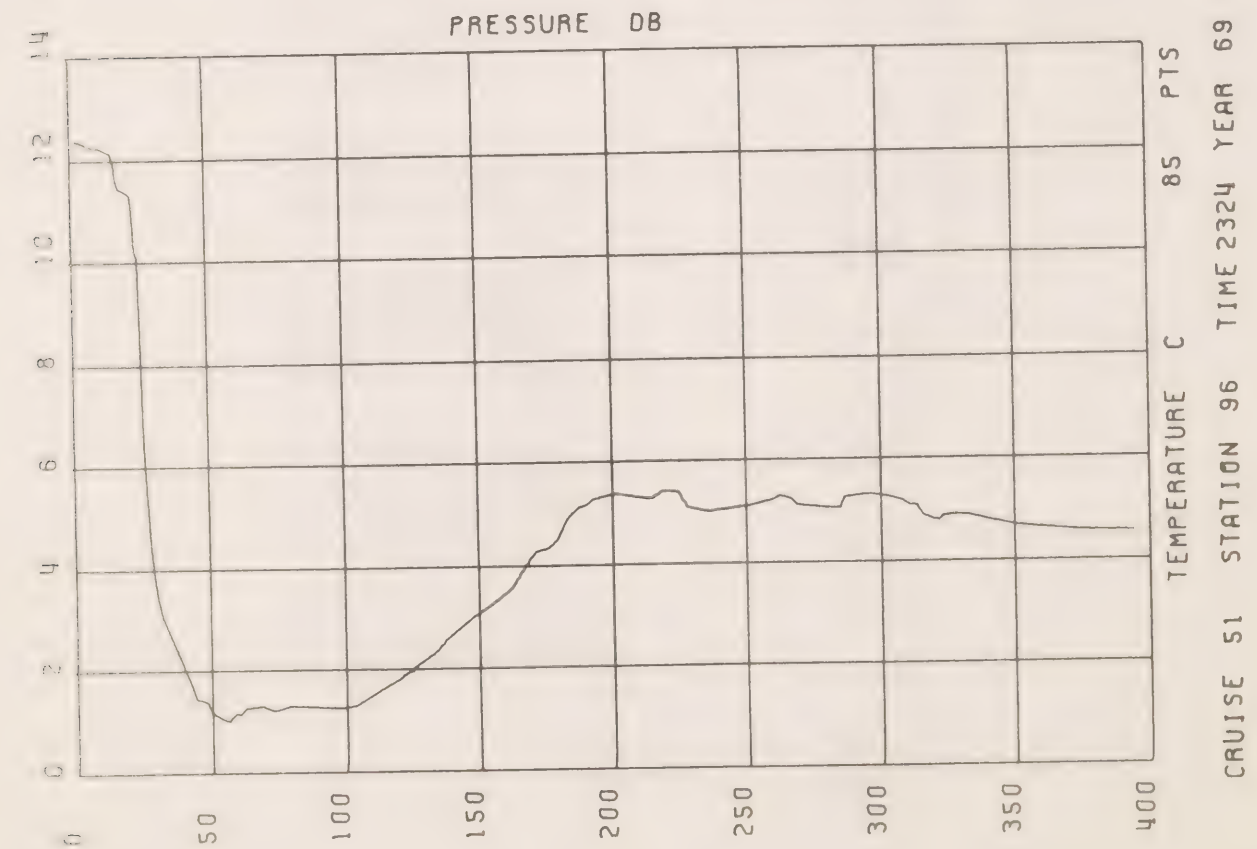
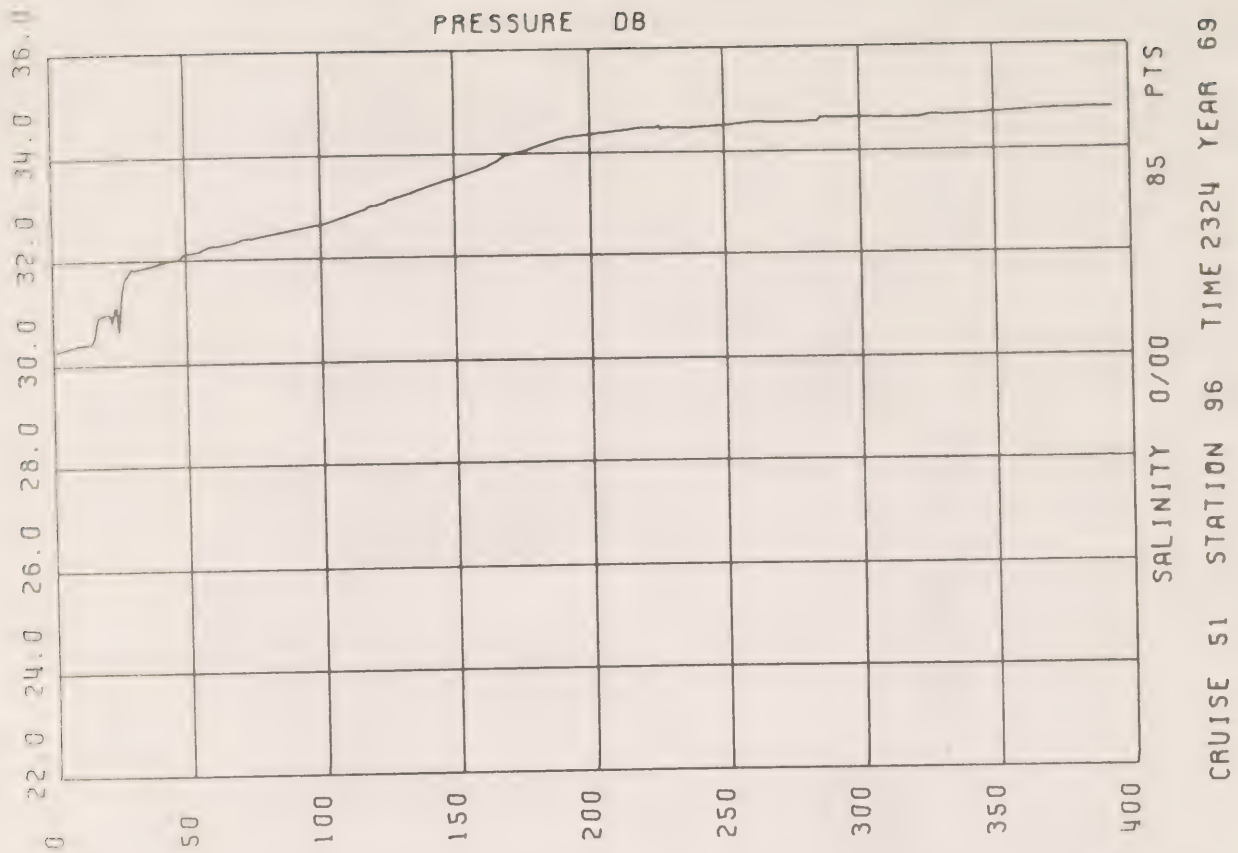


CRUISE NUMBER 69051 STATION NUMBER 095

LAT N47 21.20 YEAR 1969 WAVE-P/H WIND-DIR COUN 18
 LONG W 59 47.80 MONTH 9 WIND-SPD WIND-CLD-A INST 10
 DEPTH 484.0 DAY 29 SWEL-D AIR-TEM RESTR
 MARSQ SQ H/M 2210 BARO WET-BLB UNAS CS05

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEDA	CHI	SVA
	10.0	10.1A	11.119A	11.118	30.950A	2363	2363	1489.5W	42	2	4274
	20.0	20.2A	11.034C	11.032	30.928C	2363	2363	1489.3W	85	9	4278
	30.0	30.2A	3.499D	3.497	31.805B	2531	2531	1460.9A	119	17	2667
	50.0	50.4A	1.154A	1.152	32.125A	2575	2575	1451.4A	167	37	2252
	75.0	75.5A	1.158A	1.155	32.397A	2597	2597	1452.2W	220	71	2045
	100.0	100.7A	1.245A	1.241	32.730A	2623	2623	1453.4A	269	114	1796
	125.0	125.9A	2.287A	2.280	33.206A	2654	2654	1459.1A	311	162	1510
	150.0	151.0A	3.745D	3.735	33.801C	2689	2688	1466.6A	344	211	1191
	175.0	176.2A	4.360B	4.347	34.033A	2700	2700	1469.9A	374	258	1082
	200.0	201.4A	5.170W	5.154	34.311A	2713	2714	1474.1W	399	308	966
	225.0	226.6A	5.430A	5.411	34.449A	2721	2721	1475.7W	423	359	897
	250.0	251.8A	5.250W	5.229	34.548A	2731	2731	1475.5W	444	412	805
	300.0	302.2A	4.847A	4.823	34.643A	2743	2743	1474.8W	482	518	693



CRUISE NUMBER 69051 STATION NUMBER 096

LAT N47 25.20
 LONG W 59 40.40
 DEPTH 470.0
 MARSD SQ

YEAR 1969
 MONTH 9
 DAY 29
 H/M 2325

WAVE-P/H
 SWEL-P/H
 SWEL-D
 BARO

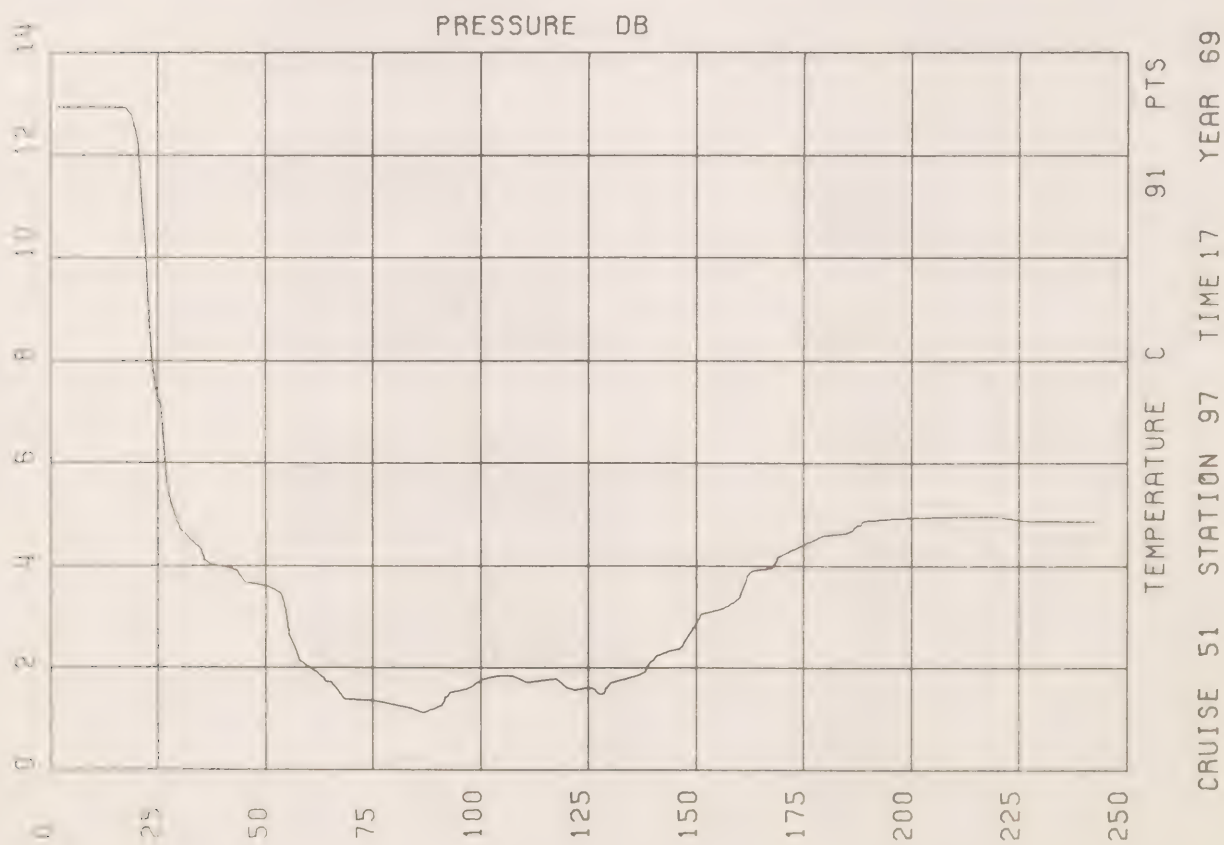
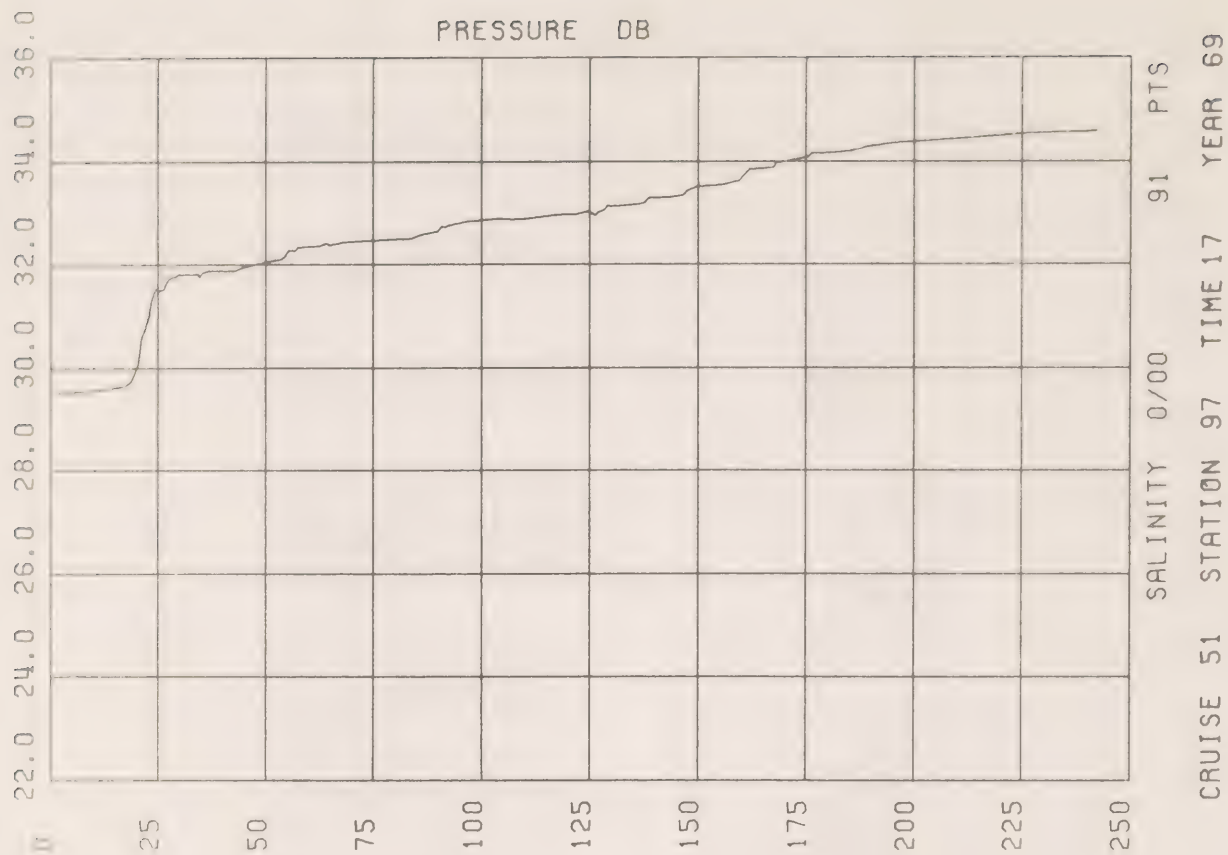
WIND-DIR
 WIND-SPD
 AIR-TEM
 WET-BLB

WW
 CLD-A

COUN 18
 INST 10
 RESTR
 UNAS CS04

INTERPOLATED

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
10.0	10.0	10.1A	12.273C	12.272	30.386C	2298	2298	1492.8A	44	2	4888
20.0	20.0	20.2A	11.387A	11.385	30.986A	2361	2361	1490.6A	89	10	4295
30.0	30.0	30.2A	3.343C	3.341	31.853C	2537	2537	1460.4A	125	18	2614
50.0	50.0	50.4A	1.126B	1.124	32.133C	2575	2575	1451.2A	175	39	2251
75.0	75.0	75.5A	1.251W	1.246	32.409A	2597	2597	1452.6A	228	73	2042
100.0	100.0	100.7A	1.260W	1.262	32.654A	2617	2617	1453.4A	277	117	1857
125.0	125.0	125.9A	2.035A	2.029	33.118A	2648	2648	1457.9A	321	167	1558
150.0	150.0	151.0A	3.093A	3.084	33.540A	2673	2674	1463.5A	356	217	1327
175.0	175.0	176.2A	4.319A	4.306	34.032A	2700	2700	1469.7A	386	268	1078
200.0	200.0	201.4A	5.389W	5.373	34.355A	2714	2714	1475.0A	412	316	959
225.0	225.0	226.6A	5.249C	5.231	34.434C	2722	2723	1474.9A	435	366	886
250.0	250.0	251.8A	5.114A	5.094	34.514A	2730	2730	1474.9A	455	417	814
300.0	300.0	302.2A	5.299A	5.274	34.635A	2737	2738	1476.7W	495	528	751



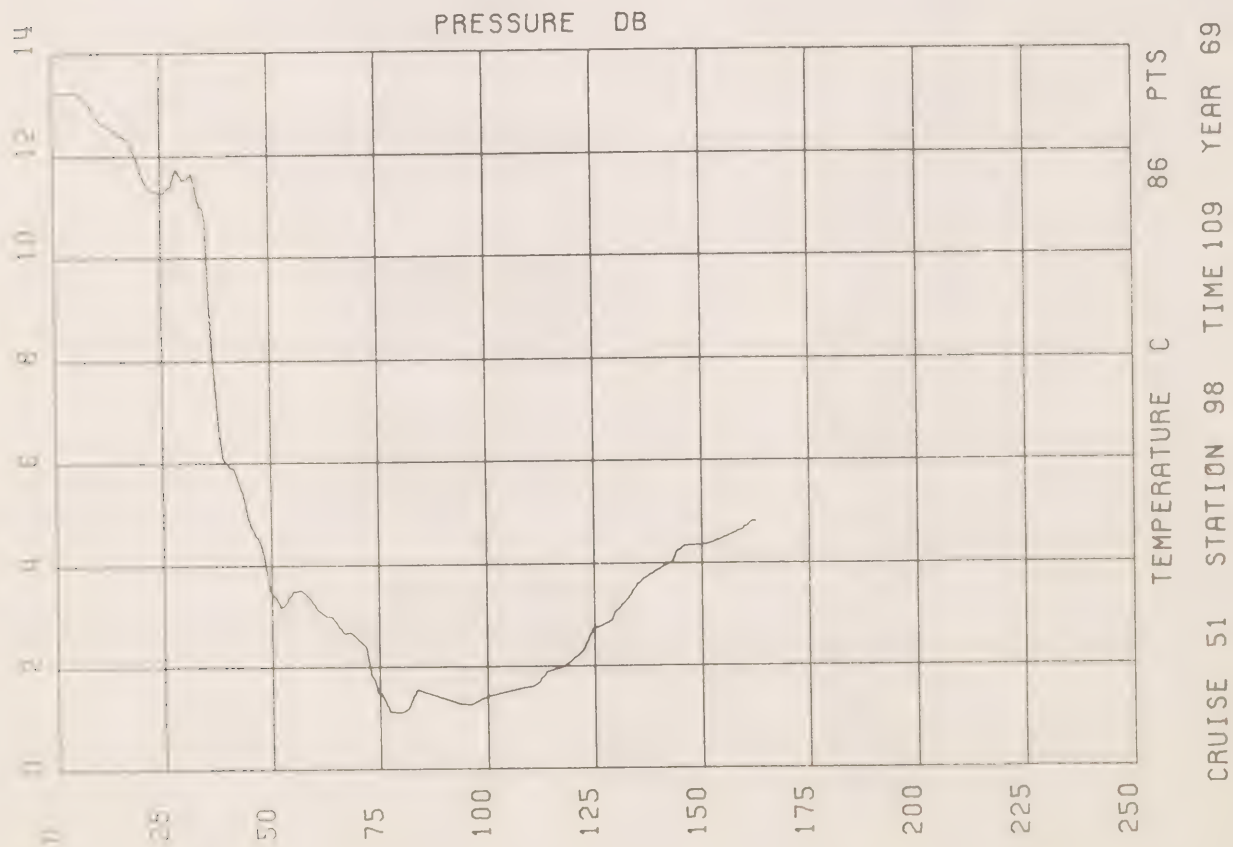
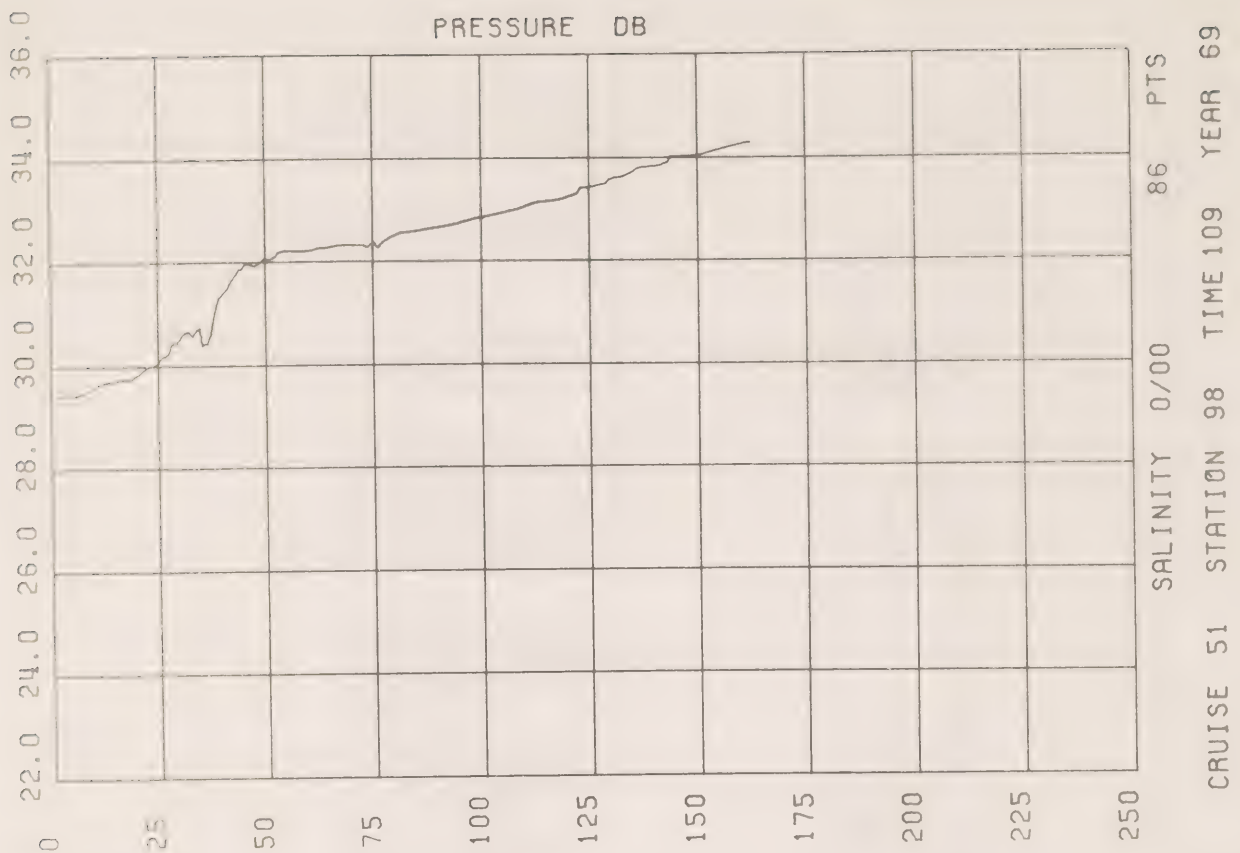
CRUISE NUMBER 69051 STATION NUMBER 097

LAT	N47	29.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 59	33.50	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		252.0	DAY	30	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	0019	BARO	WET-BLB	UNAS	CS03

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	12.949W	12.949	29.541A	2221	2221	1494.1A	48	3	5634
	20.0	20.2A	12.304C	12.301	30.015C	2269	2269	1492.6A	104	12	5172
	30.0	30.2A	4.669C	4.667	31.816C	2520	2520	1465.9A	139	20	2772
	50.0	50.4A	3.607A	3.604	32.058A	2551	2551	1462.1W	192	42	2485
	75.0	75.5A	1.366A	1.363	32.463A	2601	2601	1453.2W	247	77	2008
	100.0	100.7A	1.789W	1.784	32.866A	2630	2630	1456.0W	294	119	1732
	125.0	125.9A	1.603W	1.597	32.958B	2639	2639	1455.8W	336	168	1649
	150.0	151.0A	3.048B	3.039	33.508A	2671	2671	1463.2A	373	219	1346
	175.0	176.2A	4.456A	4.443	34.149A	2708	2708	1470.5A	403	270	1005
	200.0	201.4A	4.940A	4.924	34.382A	2721	2722	1473.2A	427	316	886
	225.0	226.6A	4.891A	4.873	34.536A	2734	2734	1473.6A	448	362	769



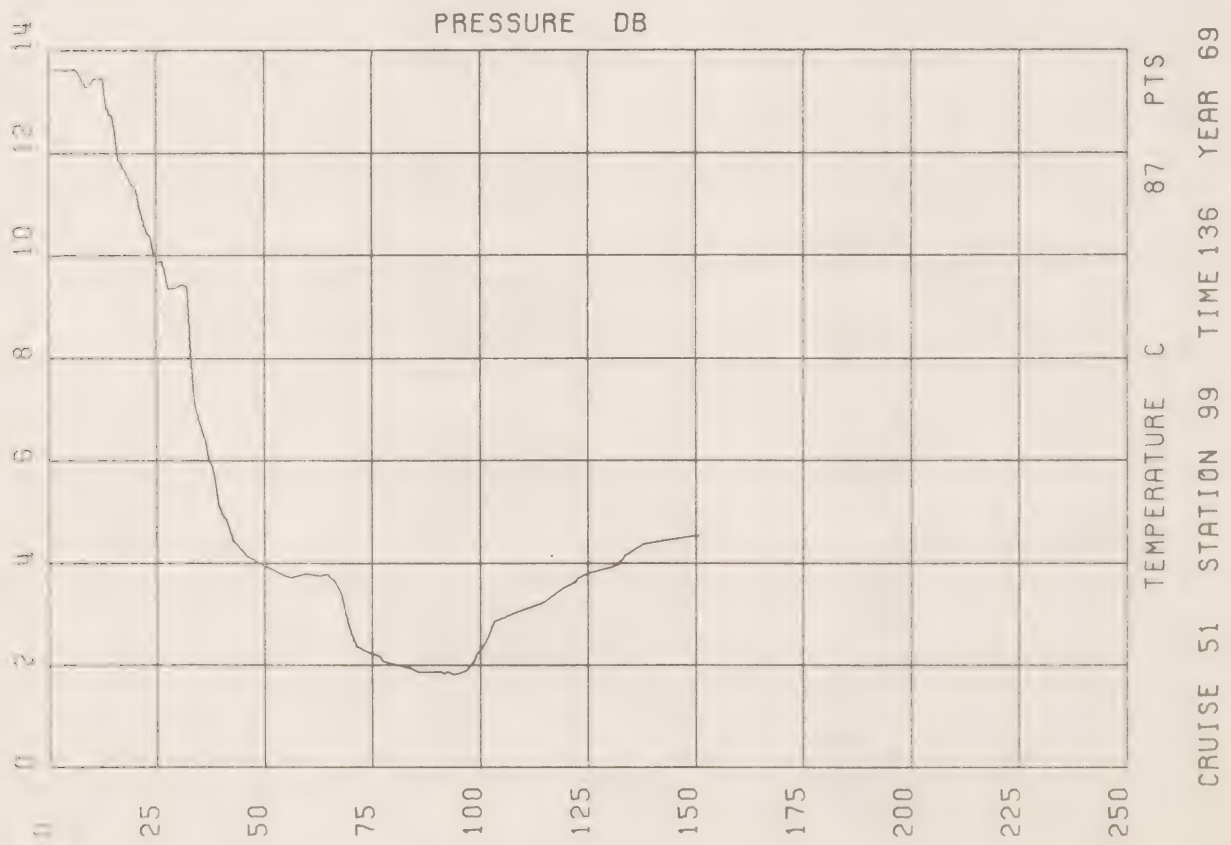
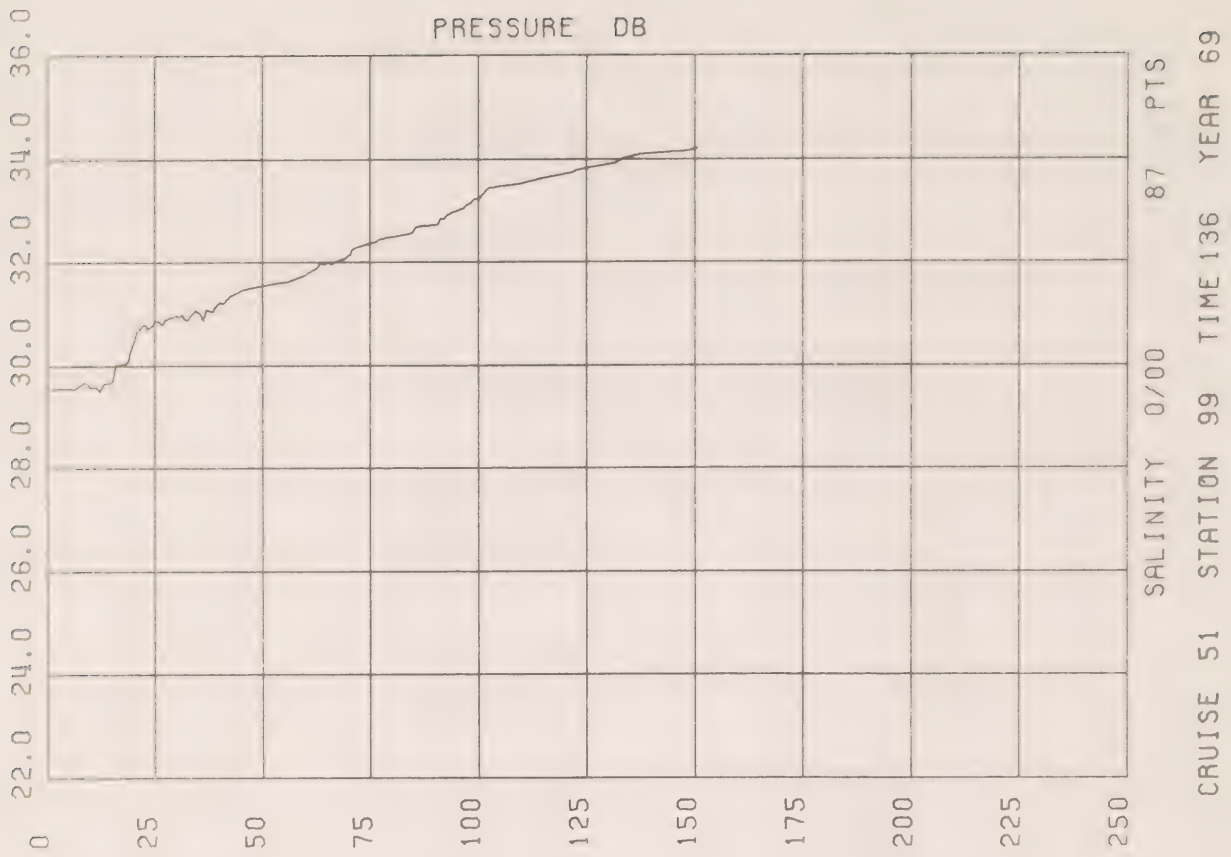
CRUISE NUMBER 69051 STATION NUMBER 098

LAT	N47	32.70	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 59	26.70	MONTH	9	SWEL-P/H	WIND-SPD	INST	10
DEPTH		186.0	DAY	30	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	0110	BARO	WET-BLB	UNAS	CS02

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	12.779B	12.778	29.596A	2228	2228	1493.6A	51	3	5562
	20.0	20.2A	11.732B	11.730	29.829A	2265	2265	1490.4A	107	11	5209
	30.0	30.2A	11.523A	11.519	30.522A	2323	2323	1490.7A	155	24	4662
	50.0	50.4A	3.444C	3.441	32.052D	2553	2553	1461.3A	226	52	2474
	75.0	75.5A	1.454A	1.451	32.350B	2592	2592	1453.4A	282	88	2099
	100.0	100.7A	1.432A	1.427	32.858A	2632	2632	1454.4A	330	131	1712
	125.0	125.9A	2.767A	2.760	33.435A	2668	2668	1461.5A	369	176	1377
	150.0	151.0A	4.367A	4.356	34.046A	2701	2701	1469.5A	399	218	1070

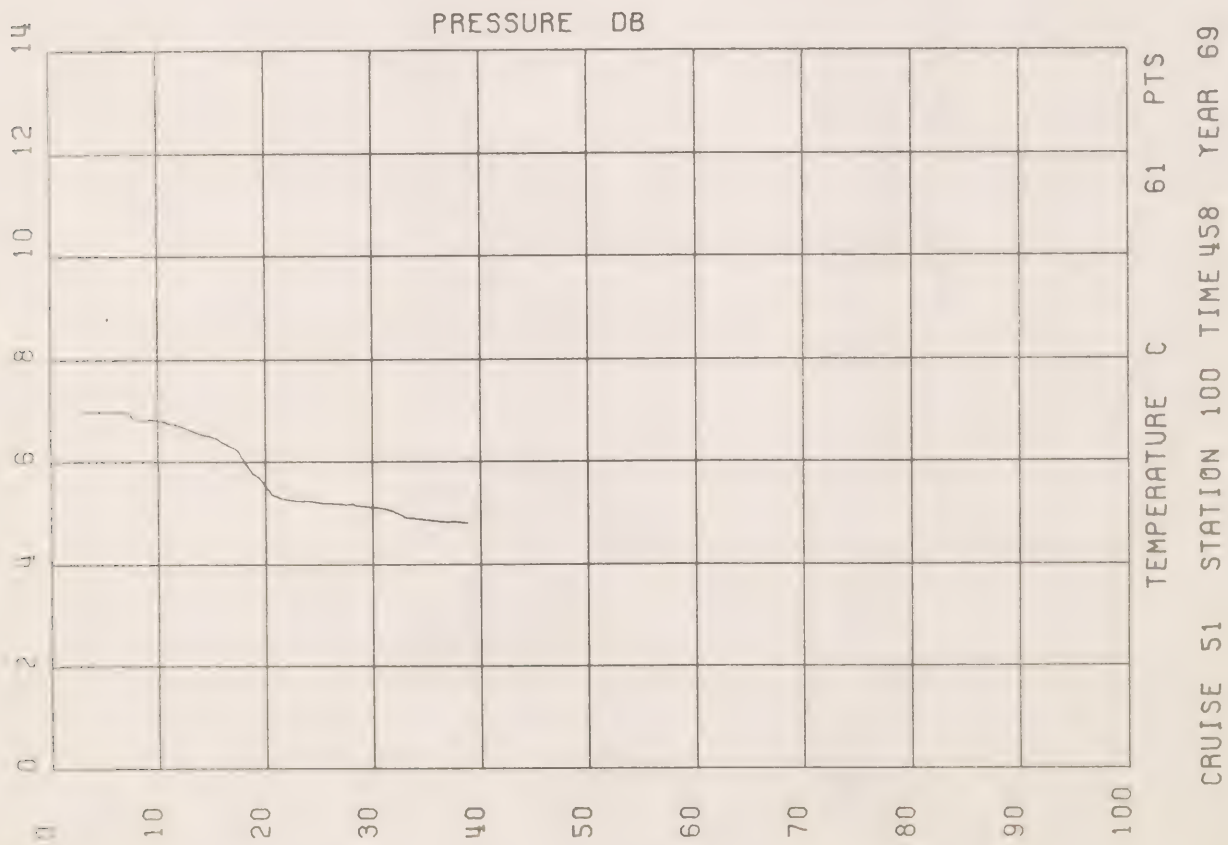
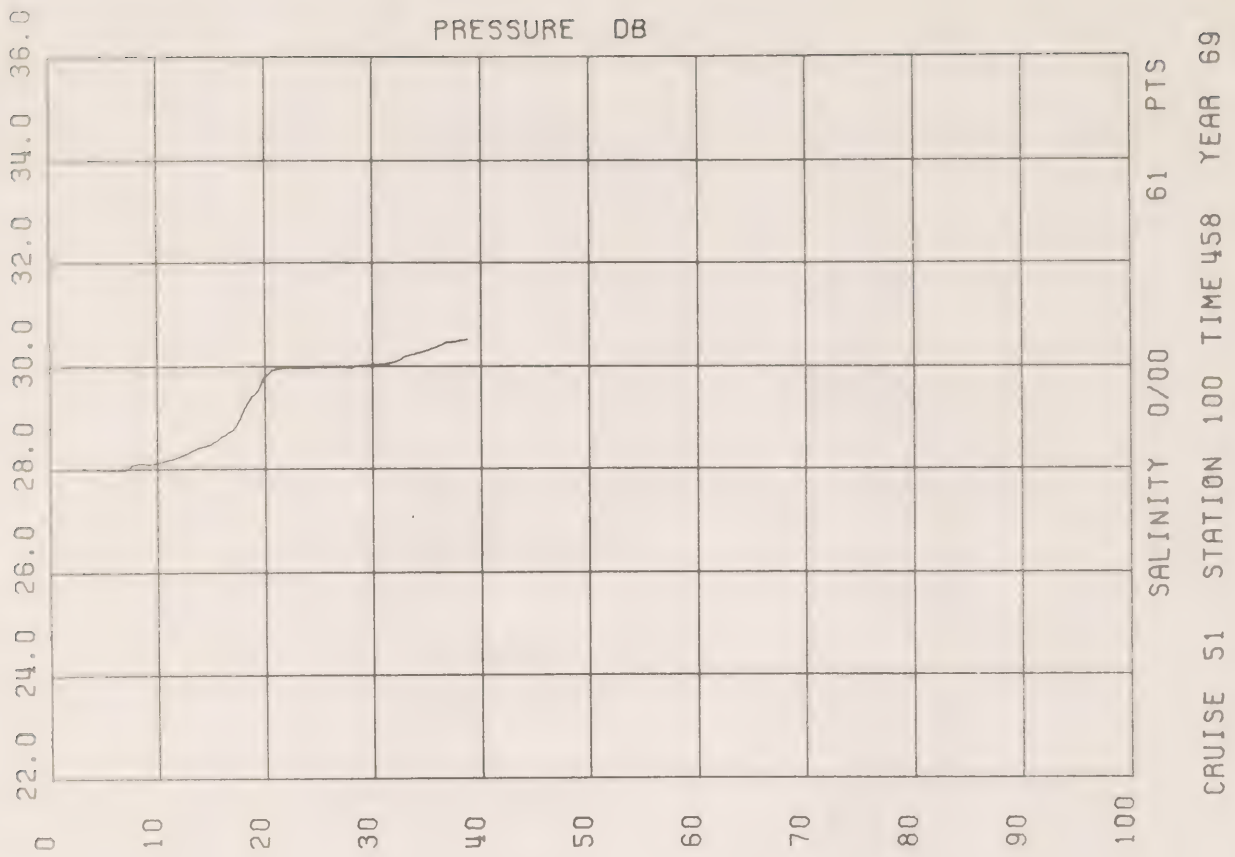


CRUISE NUMBER 69051 STATION NUMBER 099

LAT	N47	35.00	YEAR	1969	WAVE-P/H	WIND-DIR	240	WV	02	COUN	18	
LONG	W 59	22.50	MONTH	9	SWEL-P/H	0302	WIND-SPD	12	CLD-A	6	INST	10
DEPTH		156.0	DAY	30	SWEL-D	220	AIR-TEM	11.5			RESTR	
MARSD	SQ		H/M	0137	BARO	1007.5	WET-BLB	10.5			UNAS	CS01

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SA
	10.0	10.1	13.450	13.449	29.564	2213	2213	1495.8	50	3	5709
	20.0	20.2A	11.230C	11.228	30.490B	2325	2325	1489.4A	103	11	4636
	30.0	30.2A	9.410A	9.407	30.956B	2391	2391	1483.6W	146	21	4003
	50.0	50.4A	3.921A	3.918	31.552A	2508	2508	1462.7A	213	49	2894
	75.0	75.5	2.210	2.206	32.380	2588	2588	1456.8	278	90	2128
	100.0	100.7A	2.354B	2.349	33.274C	2659	2659	1459.1A	324	131	1462
	125.0	125.9A	3.828C	3.819	33.843B	2691	2691	1466.6A	357	169	1166

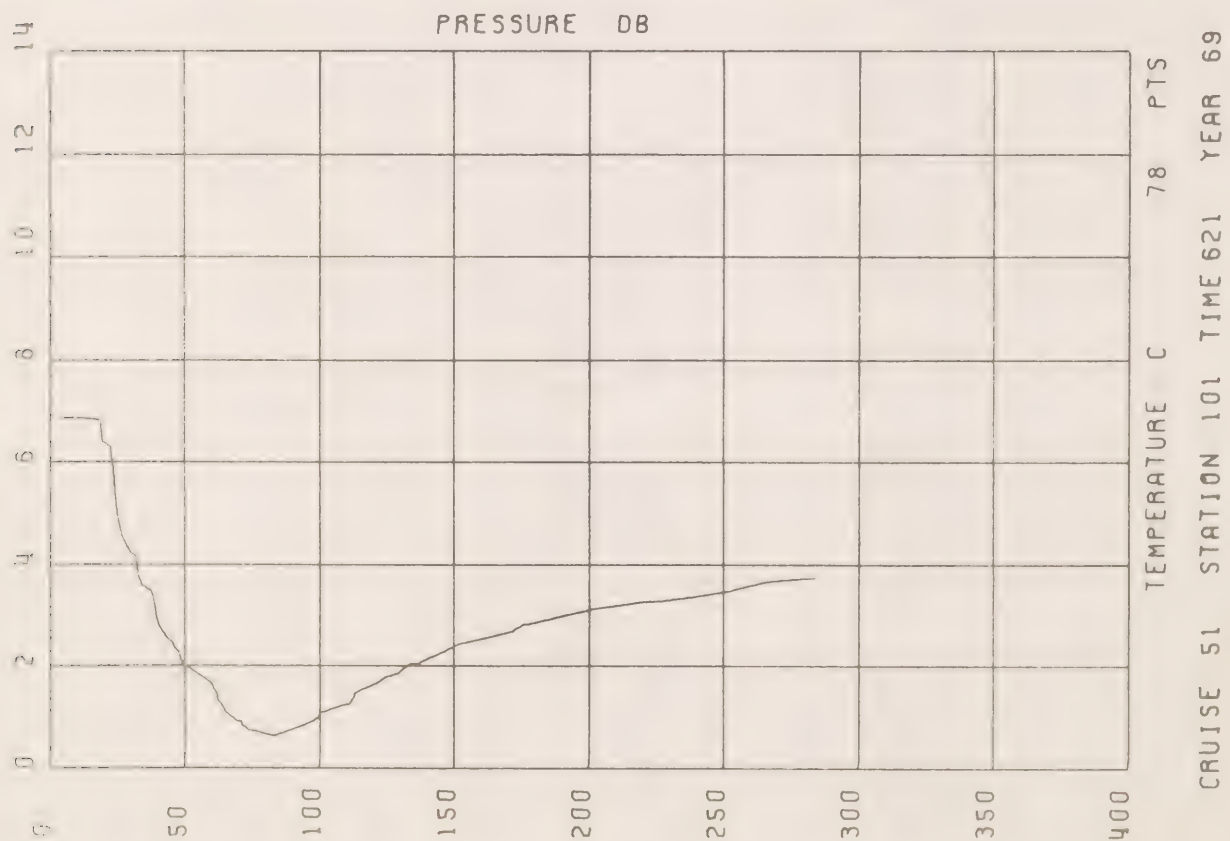
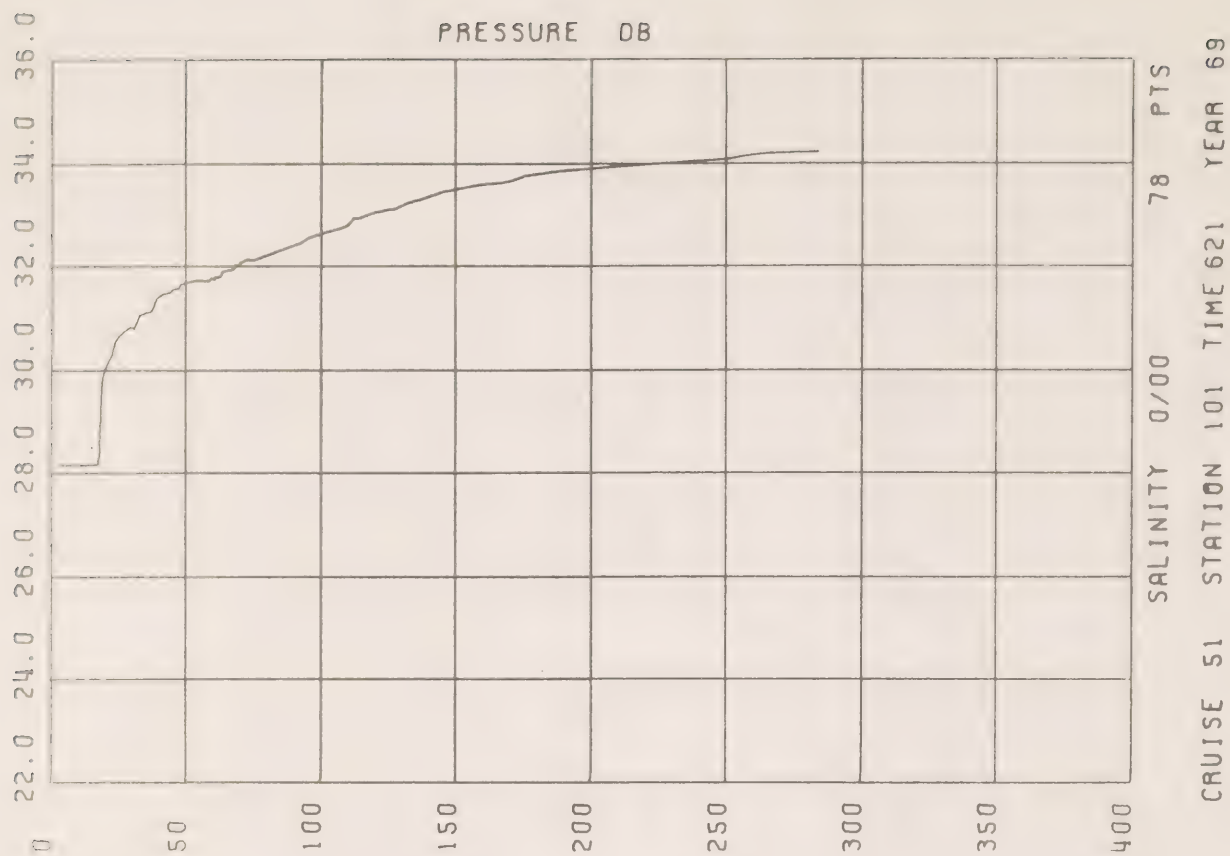


LAT		N49	11.00	YEAR	1969	WAVE-P/H	0403	WIND-DIR	280	WW	02	COUN	18
LONG		W 64	43.00	MONTH	10	SWEL-P/H		WIND-SPD	25	CLD-A	6	INST	10
DEPTH			42.0	DAY	01	SWEL-D		AIR-TEM	8.5			RESTR	
MARSD		SQ		H/M	1750	BARO	1008.0	WET-BLB	7.1			UNAS	GSPL1

CRUISE NUMBER 69051 STATION NUMBER 100

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEQA	CHI	SVA
	10.0	10.1A	6.812A	6.811	28.128A	2207	2207	1469.5W	41	3	5767
	20.0	20.2A	5.460B	5.458	29.840A	2356	2357	1466.4A	94	11	4332
	30.0	30.2A	5.112A	5.110	30.020A	2375	2375	1465.3W	137	22	4163



CRUISE NUMBER 69051 STATION NUMBER 101

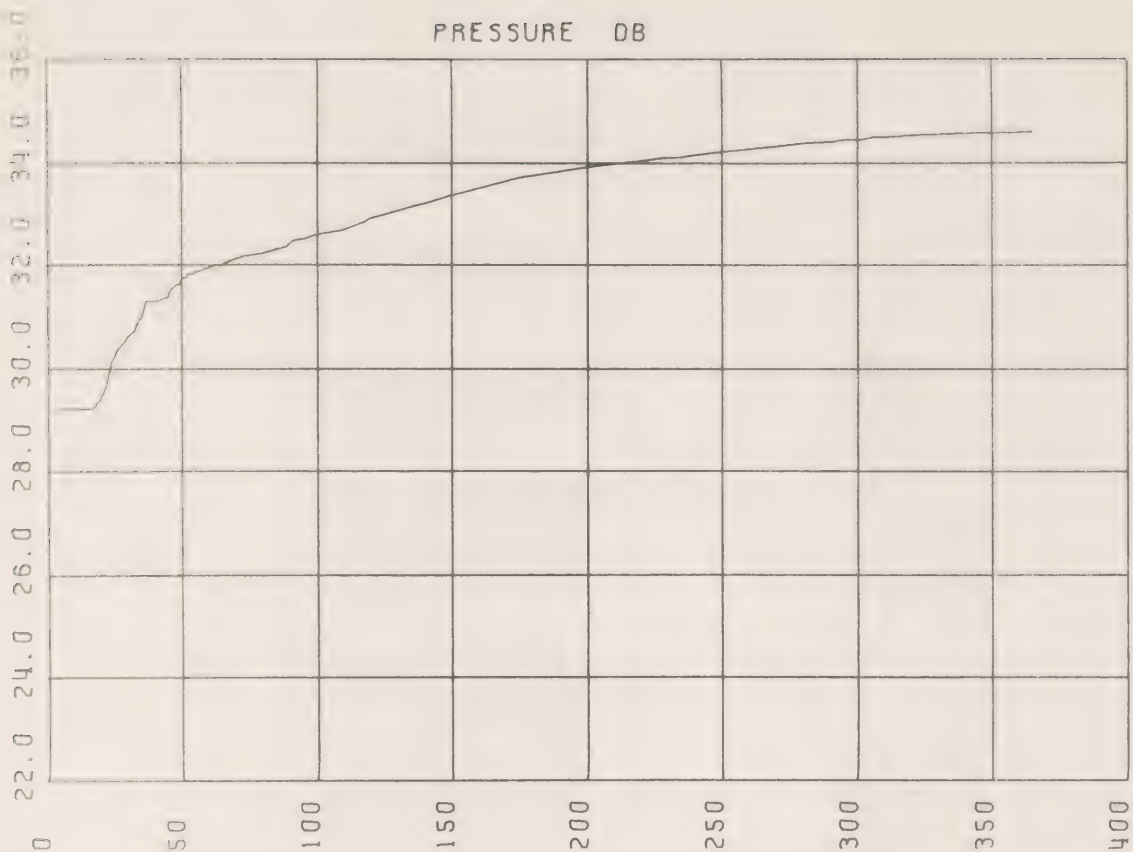
LAT	N49	14.00	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	41.00	MONTH	10	SWEL-P/H	WIND-SPD	INST	10
DEPTH		288.0	DAY	01	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	1822	BARO	WET-BLB	UNAS	GSPL1

WW
CLD-A

INTERPOLATED

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	6.880A	6.879	28.146A	2207	2207	1469.8W	42	3	5761
	20.0	20.2A	6.357A	6.355	30.045A	2363	2363	1470.3A	96	11	4277
	30.0	30.2A	4.198B	4.196	30.848C	2449	2449	1462.6W	134	21	3458
	50.0	50.4A	1.978A	1.976	31.708A	2536	2536	1454.5A	194	45	2621
	75.0	75.5A	0.736W	0.733	32.129A	2578	2578	1449.9W	255	84	2225
	100.0	100.7A	1.089A	1.085	32.650A	2617	2617	1452.7A	307	130	1849
	125.0	125.9A	1.806A	1.800	33.114A	2650	2650	1456.8A	350	179	1544
	150.0	151.0A	2.427A	2.419	33.505A	2676	2676	1460.5A	386	229	1297
	175.0	176.2A	2.816A	2.805	33.762A	2693	2693	1463.0A	416	281	1138
	200.0	201.4A	3.112A	3.099	33.899A	2702	2702	1464.9A	443	333	1062
	225.0	226.6A	3.281A	3.266	33.998A	2708	2708	1466.1A	469	390	1005
	250.0	251.8A	3.476A	3.459	34.090A	2713	2714	1467.5A	494	450	955

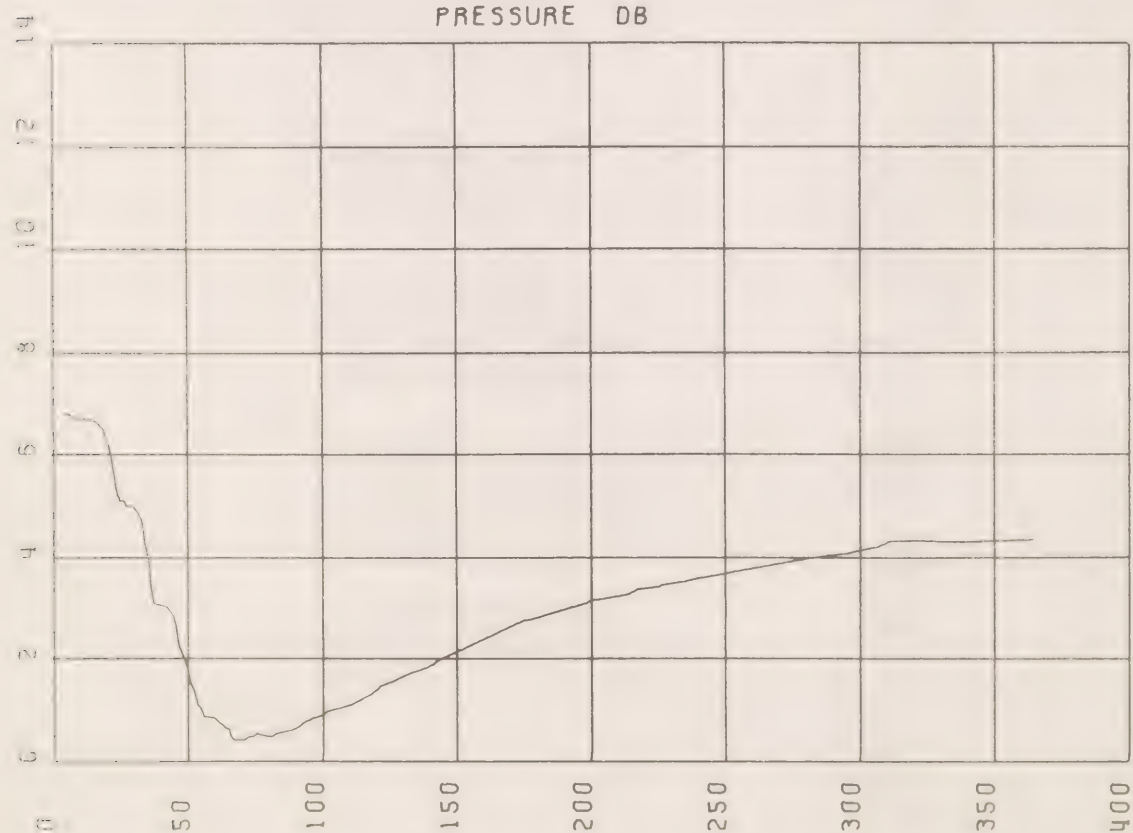
PRESSURE DB



SALINITY 0/00 84 PTS

CRUISE 51 STATION 102 TIME 652 YEAR 69

PRESSURE DB



TEMPERATURE C 84 PTS

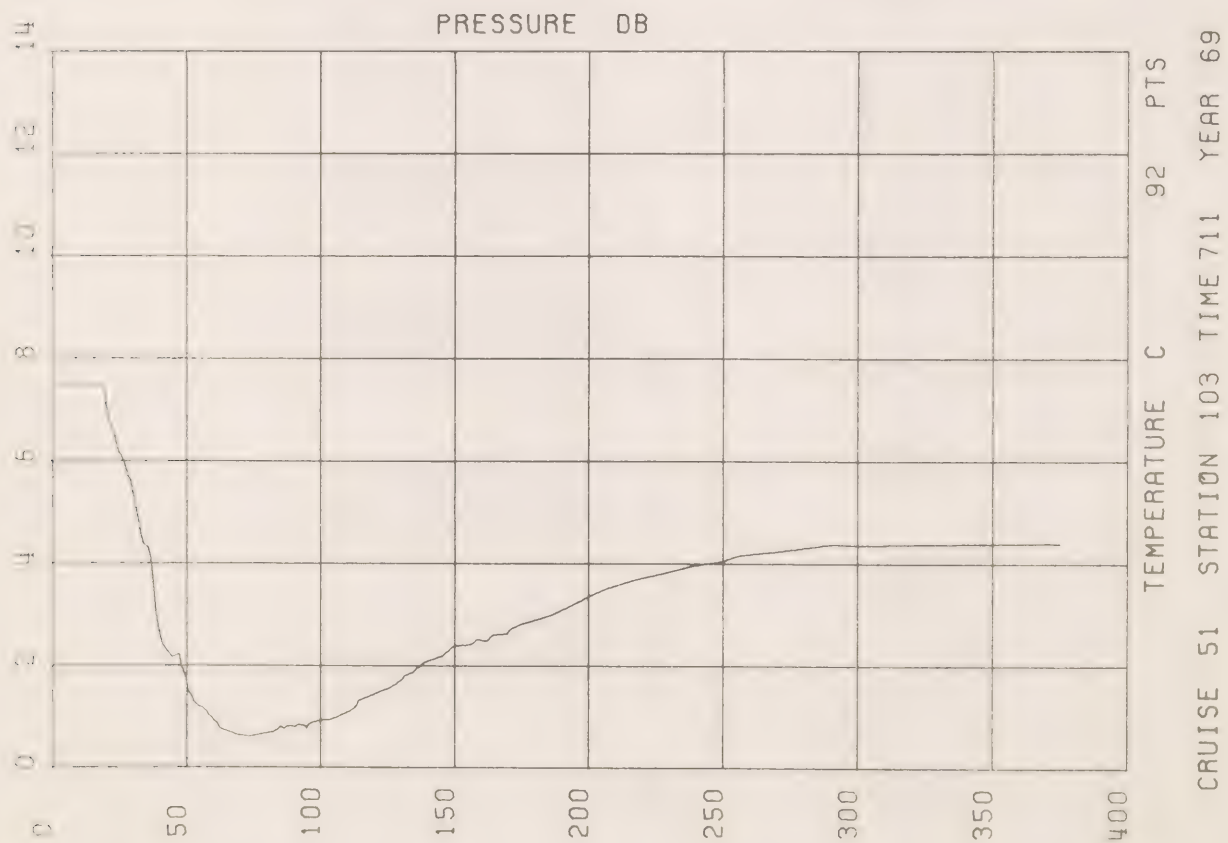
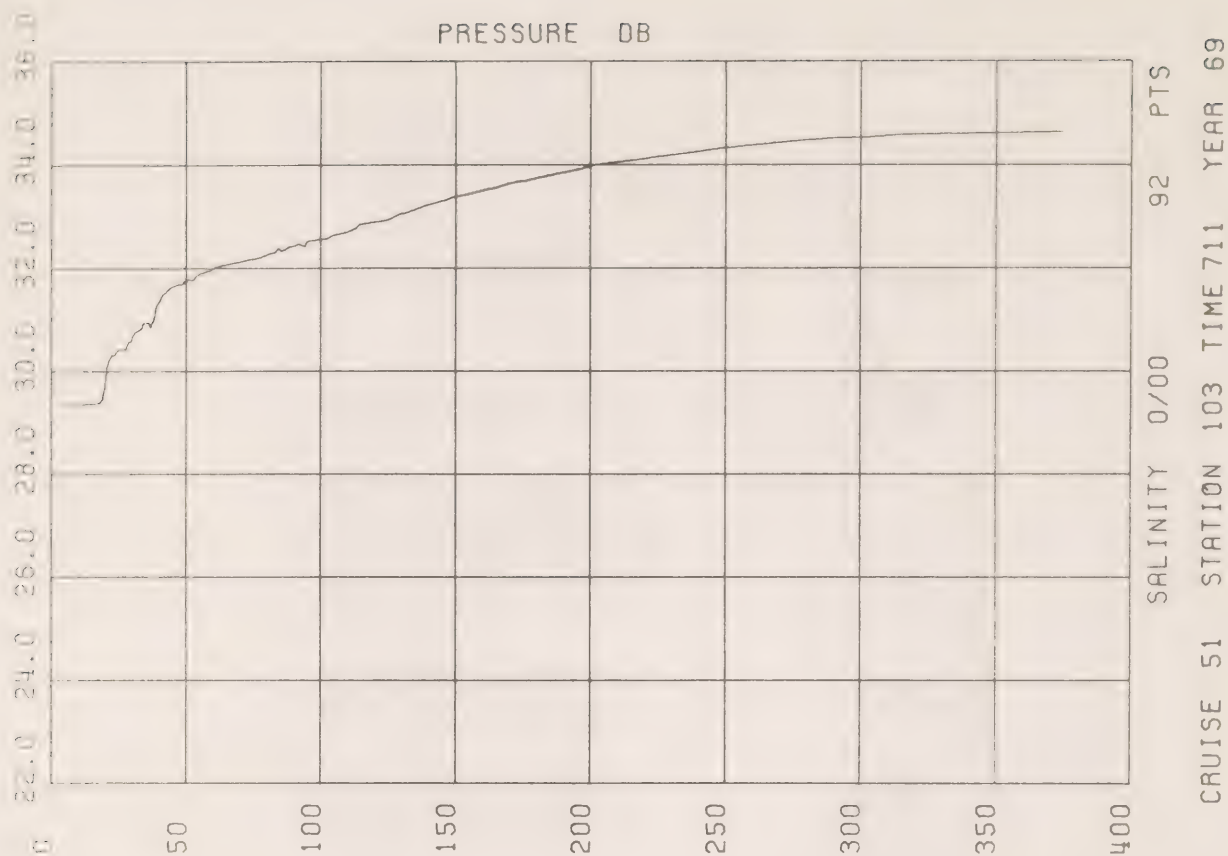
CRUISE 51 STATION 102 TIME 652 YEAR 69

LAT N49 16.20
 LONG W 64 39.40
 DEPTH 365.0
 MARSD SQ
 YEAR 1969
 MONTH 10
 DAY 01
 H/M 1853
 WAVE-P/H 0403
 SWEL-P/H
 SWEL-D
 BARO 1009.0
 WIND-DIR 280
 WIND-SPD 25
 AIR-TEM 8.4
 WET-BLB 7.0
 WW 02
 CLD-A 6
 COUN 18
 INST 10
 RESTR
 UNAS GSPL1

CRUISE NUMBER 69051 STATION NUMBER 102

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	6.724W	6.723	29.204A	2292	2292	1470.5W	35	2	4950
	20.0	20.2A	6.190C	6.188	29.444A	2318	2318	1468.8A	85	10	4708
	30.0	30.2A	4.910A	4.908	30.644A	2426	2426	1465.3A	125	20	3673
	50.0	50.4A	1.506D	1.504	31.777D	2544	2545	1452.5A	187	46	2539
	75.0	75.5A	0.561D	0.558	32.202A	2585	2585	1449.2A	245	82	2162
	100.0	100.7	0.950	0.946	32.613	2615	2615	1451.9	296	128	1869
	125.0	125.9A	1.557A	1.551	33.006A	2643	2643	1455.6A	340	179	1608
	150.0	151.0	2.160	2.152	33.372	2668	2668	1459.2	378	232	1377
	175.0	176.2A	2.749A	2.739	33.718A	2691	2691	1462.7A	410	285	1165
	200.0	201.4A	3.141A	3.128	33.918A	2703	2703	1465.0A	437	338	1051
	225.0	226.6A	3.444A	3.429	34.088A	2714	2714	1466.9A	462	393	953
	250.0	251.8A	3.686A	3.669	34.219A	2722	2722	1468.5A	486	450	880
	300.0	302.2A	4.153A	4.131	34.456A	2736	2736	1471.7A	526	564	755

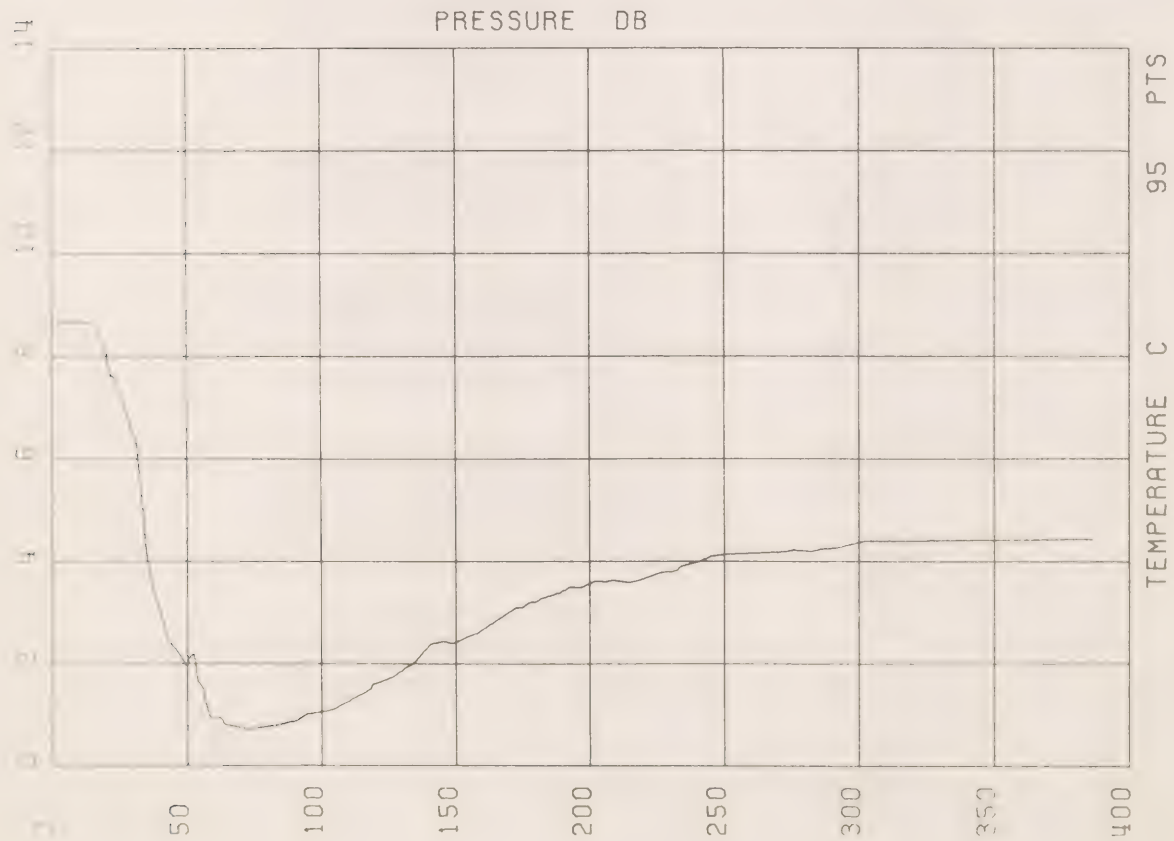
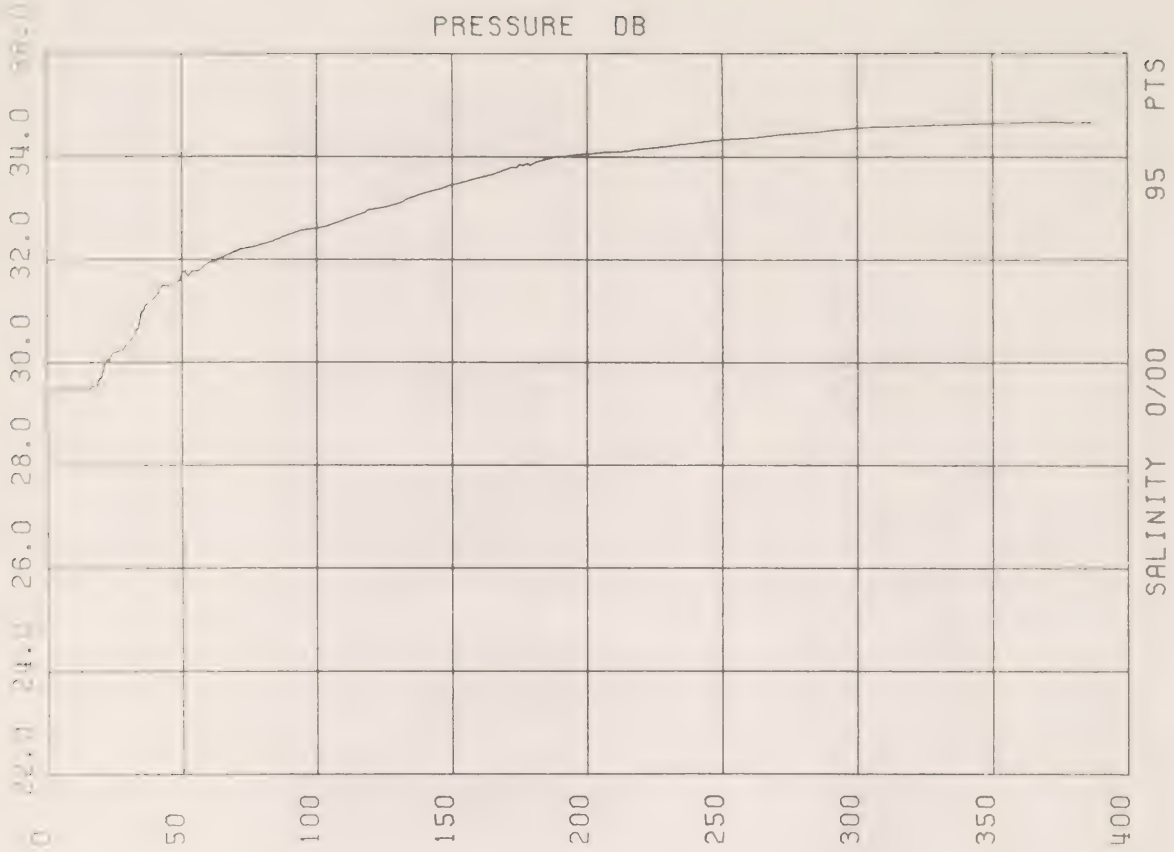


CRUISE NUMBER 69051 STATION NUMBER 103

LAT	N49	18.60	YEAR	1969	WAVE-P/H	WIND-DIR	WW	COUN	18
LONG	W 64	37.60	MONTH	10	SWEL-P/H	WIND-SPD	CLD-A	INST	10
DEPTH		382.0	DAY	01	SWEL-D	AIR-TEM		RESTR	
MARSD	SQ		H/M	1928	BARO	WET-BLB		UNAS	GSPL 1

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEDA	CHI	SVA
	10.0	10.1A	7.490W	7.489	29.349A	2294	2294	1473.8W	36	2	4934
	20.0	20.2A	7.123C	7.121	29.917D	2343	2343	1473.3W	85	10	4465
	30.0	30.2A	5.394A	5.392	30.692A	2425	2425	1467.4A	125	20	3685
	50.0	50.4A	1.625C	1.623	31.761D	2543	2543	1453.0A	186	45	2557
	75.0	75.5A	0.627A	0.624	32.183A	2583	2583	1449.5W	244	82	2178
	100.0	100.7A	0.922A	0.918	32.568A	2612	2612	1451.8W	296	128	1902
	125.0	125.9A	1.542A	1.536	32.954B	2639	2639	1455.5A	340	179	1647
	150.0	151.0A	2.381A	2.373	33.397A	2668	2668	1460.2A	377	231	1374
	175.0	176.2A	2.811A	2.801	33.699A	2688	2688	1462.9A	410	285	1183
	200.0	201.4A	3.378A	3.365	33.999A	2707	2707	1466.1A	437	339	1010
	225.0	226.6A	3.779A	3.763	34.171A	2717	2717	1468.5A	462	392	922
	250.0	251.8A	4.068A	4.050	34.331A	2727	2727	1470.3A	483	445	835
	300.0	302.2A	4.350A	4.327	34.529A	2740	2740	1472.6W	522	554	721



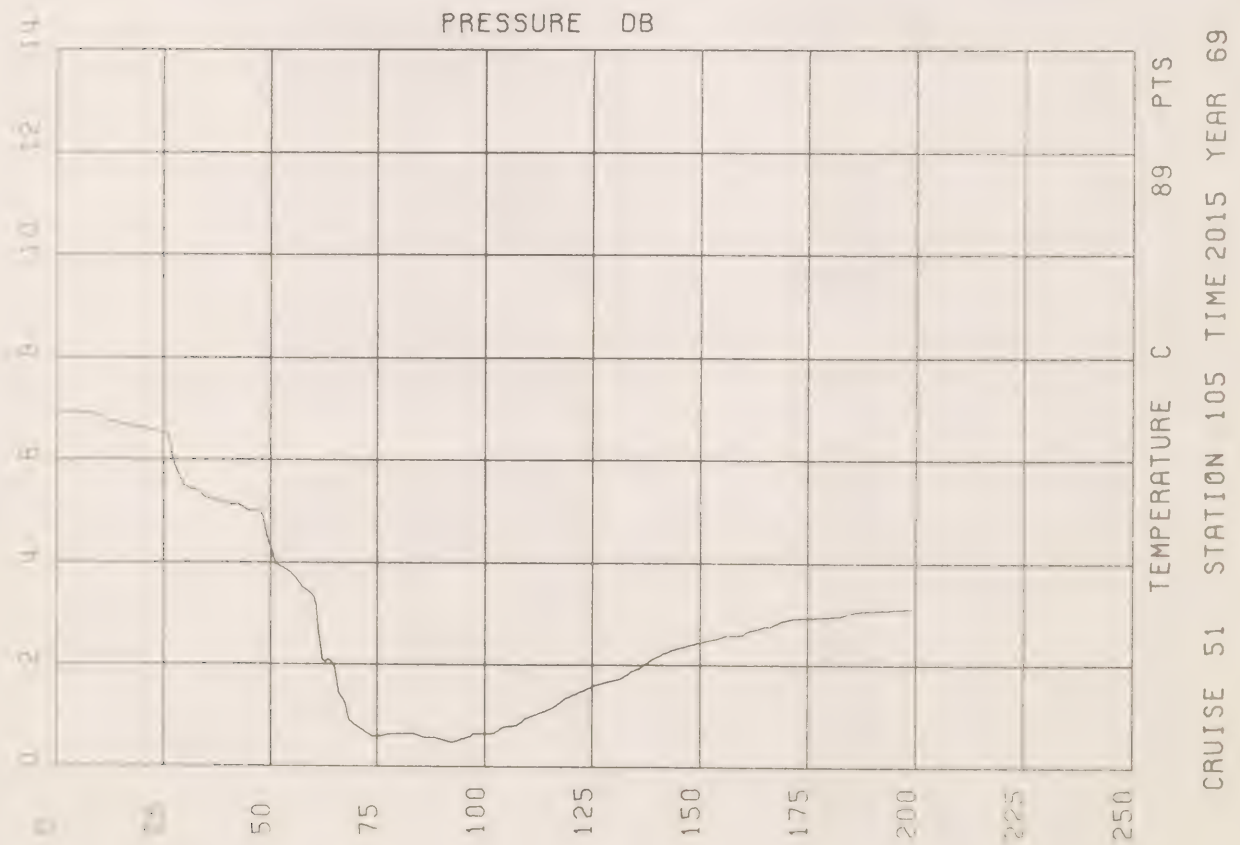
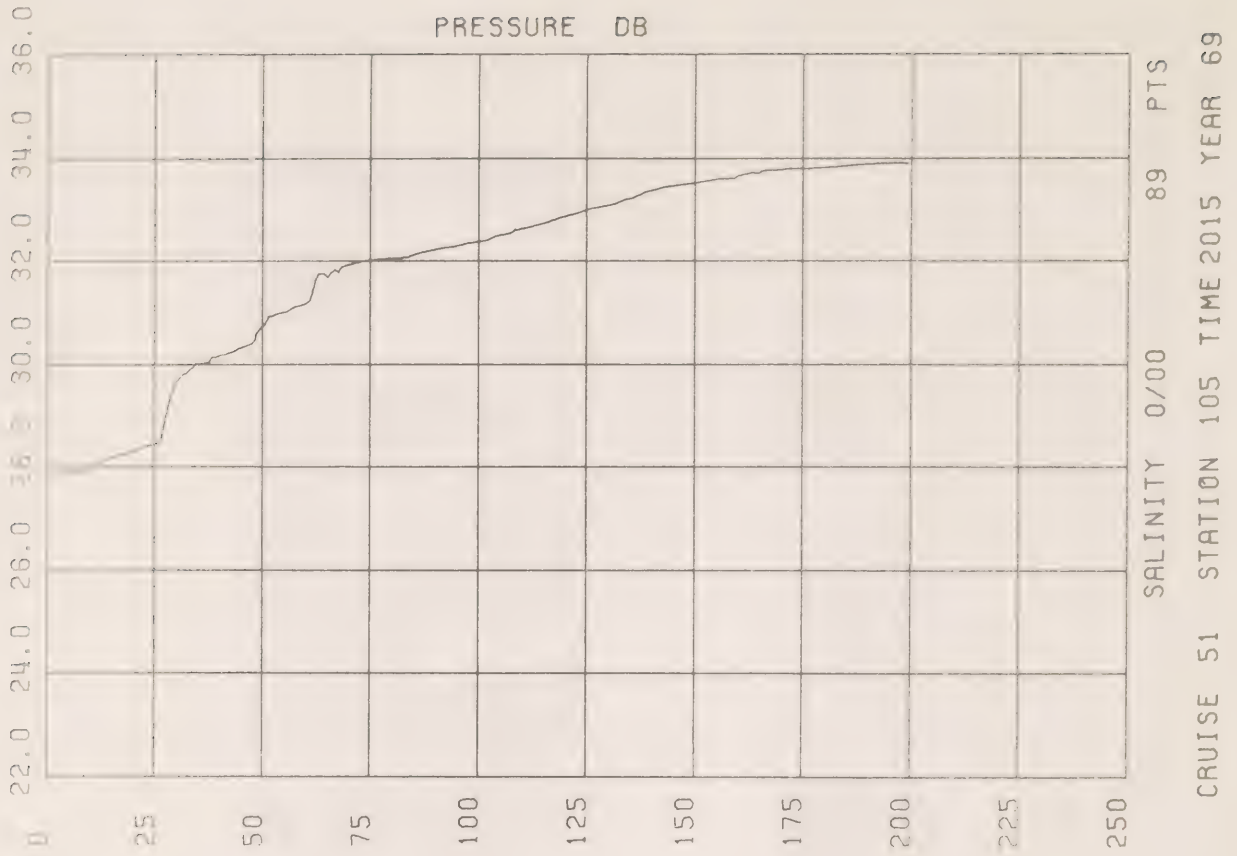
CRUISE NUMBER 69051 STATION NUMBER 104

LAT	N49	21.30	YEAR 1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	36.10	MONTH 10	SWEL-P/H	WIND-SPD	INST	10
DEPTH		382.0	DAY 01	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M 2000	BARO	WET-BLB	UNAS	GSPL1

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.668W	8.668	29.497A	2289	2289	1478.5W	42	2	4980
	20.0	20.2A	8.062C	8.060	29.719A	2315	2315	1476.7W	91	10	4730
	30.0	30.2A	6.430E	6.428	30.392C	2390	2390	1471.3A	135	21	4021
	50.0	50.4A	2.096B	2.094	31.748B	2539	2539	1455.0W	198	47	2599
	75.0	75.5A	0.733A	0.730	32.234A	2586	2586	1450.0A	257	85	2145
	100.0	100.7A	1.051A	1.047	32.616A	2615	2615	1452.4A	307	129	1872
	125.0	125.9	1.710	1.704	33.021	2643	2643	1456.3	351	179	1608
	150.0	151.0A	2.429A	2.421	33.467A	2673	2673	1460.6A	388	231	1325
	175.0	176.2A	3.145W	3.134	33.830A	2696	2696	1464.5A	418	282	1116
	200.0	201.4A	3.596B	3.582	34.064A	2711	2711	1467.1W	444	332	983
	225.0	226.6A	3.772A	3.756	34.188A	2719	2719	1468.5A	468	383	909
	250.0	251.8A	4.132A	4.114	34.349A	2728	2728	1470.6A	489	437	828
	300.0	302.2A	4.382A	4.359	34.575A	2743	2743	1472.8A	528	545	690

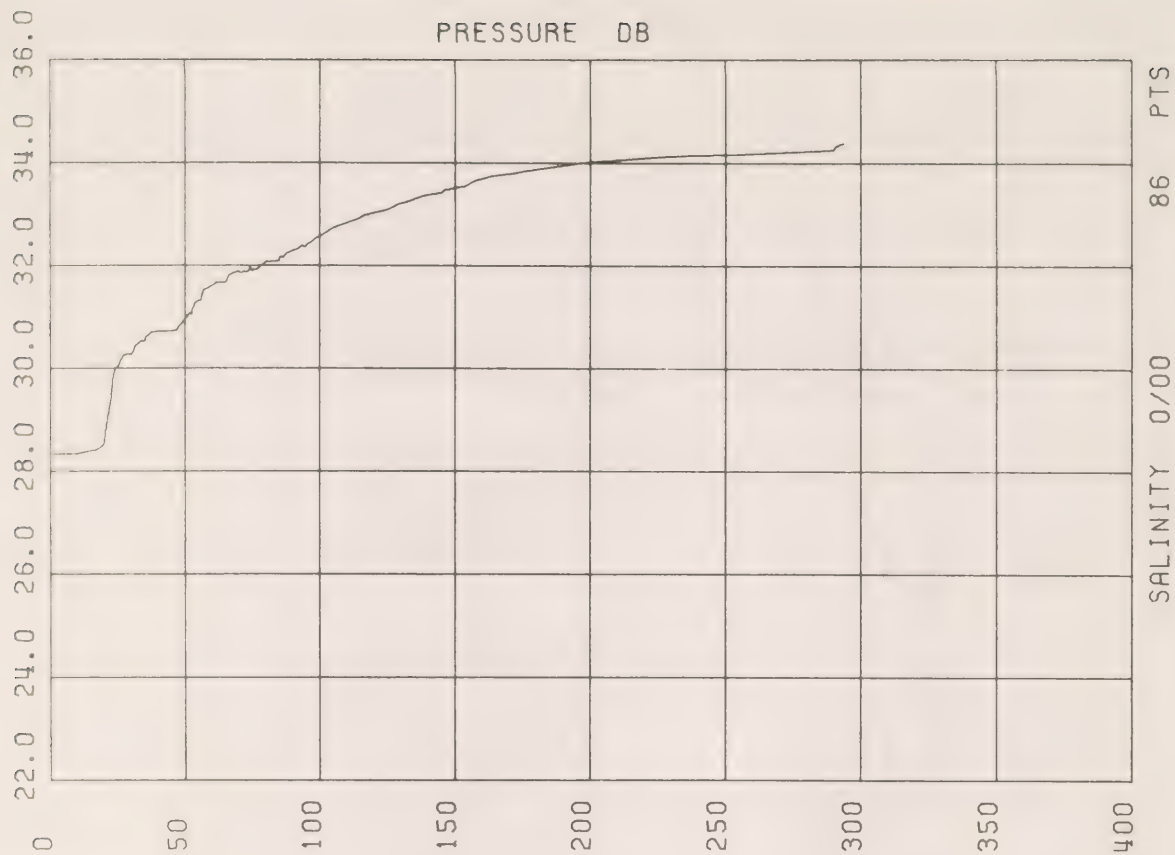


LAT N49 9.70
 LONG W 64 38.10
 DEPTH 220.0
 MARSQ SQ
 YEAR 1969
 MONTH 10
 DAY 01
 H/M 2247
 WAVE-P/H
 SWEL-P/H
 SWEL-D
 BARO
 WIND-DIR
 WIND-SPD
 AIR-TEM
 WET-BLB
 WW
 CLD-A
 STATION NUMBER 105
 CRUISE NUMBER 69051

COUN 18
 INST 10
 RESTR
 UNAS GSPL2

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	6.886A	6.885	27.938A	2191	2191	1469.5W	55	3	5918
	20.0	20.2A	6.635A	6.633	28.306A	2223	2223	1469.2W	113	12	5614
	30.0	30.2A	5.471B	5.469	29.706C	2347	2347	1466.5W	166	25	4432
	50.0	50.4A	4.257B	4.254	30.738C	2440	2440	1463.0A	248	59	3540
	75.0	75.5	0.590	0.587	32.015	2569	2569	1449.1	318	103	2304
	100.0	100.7A	0.641W	0.637	32.389A	2599	2599	1450.2A	373	152	2021
	125.0	125.9A	1.616C	1.610	33.017B	2644	2644	1455.9A	419	205	1605
	150.0	151.0A	2.472A	2.463	33.530A	2678	2678	1460.8A	454	255	1281
	175.0	176.2A	2.931A	2.920	33.793A	2695	2695	1463.5A	484	305	1123



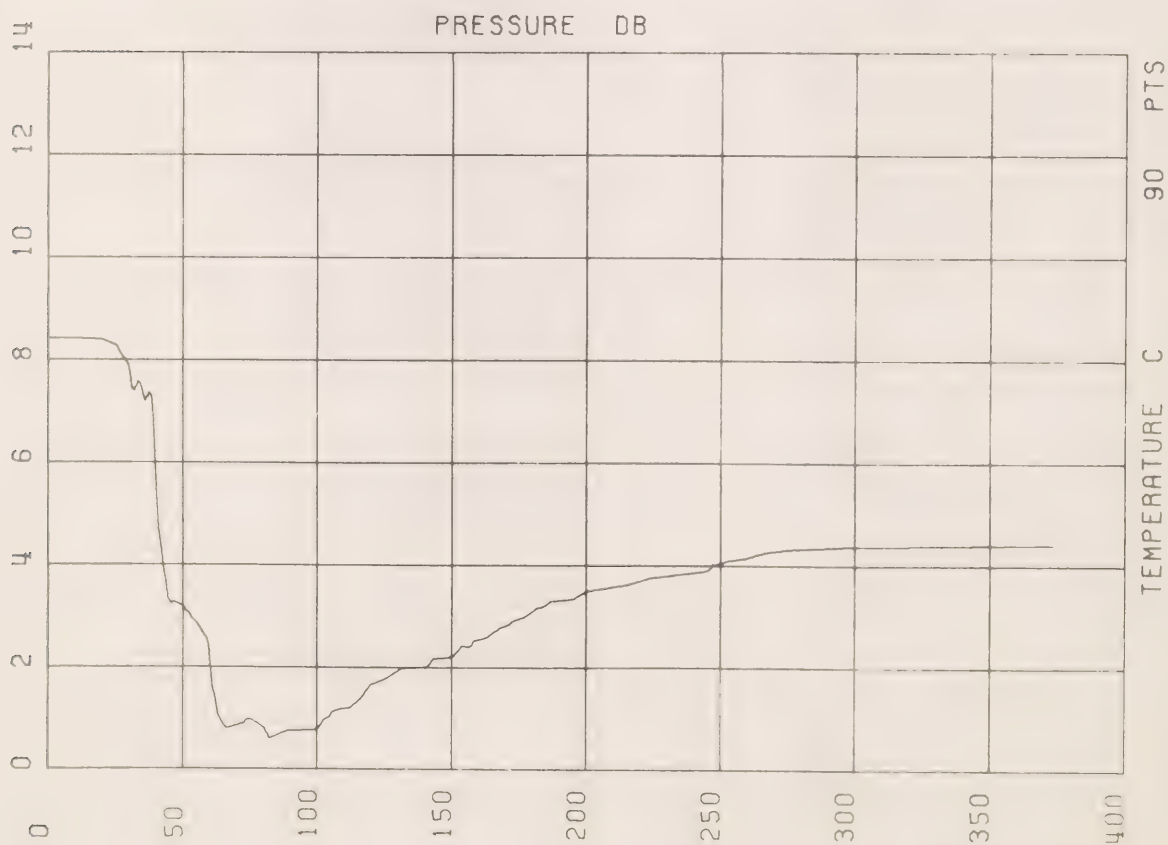
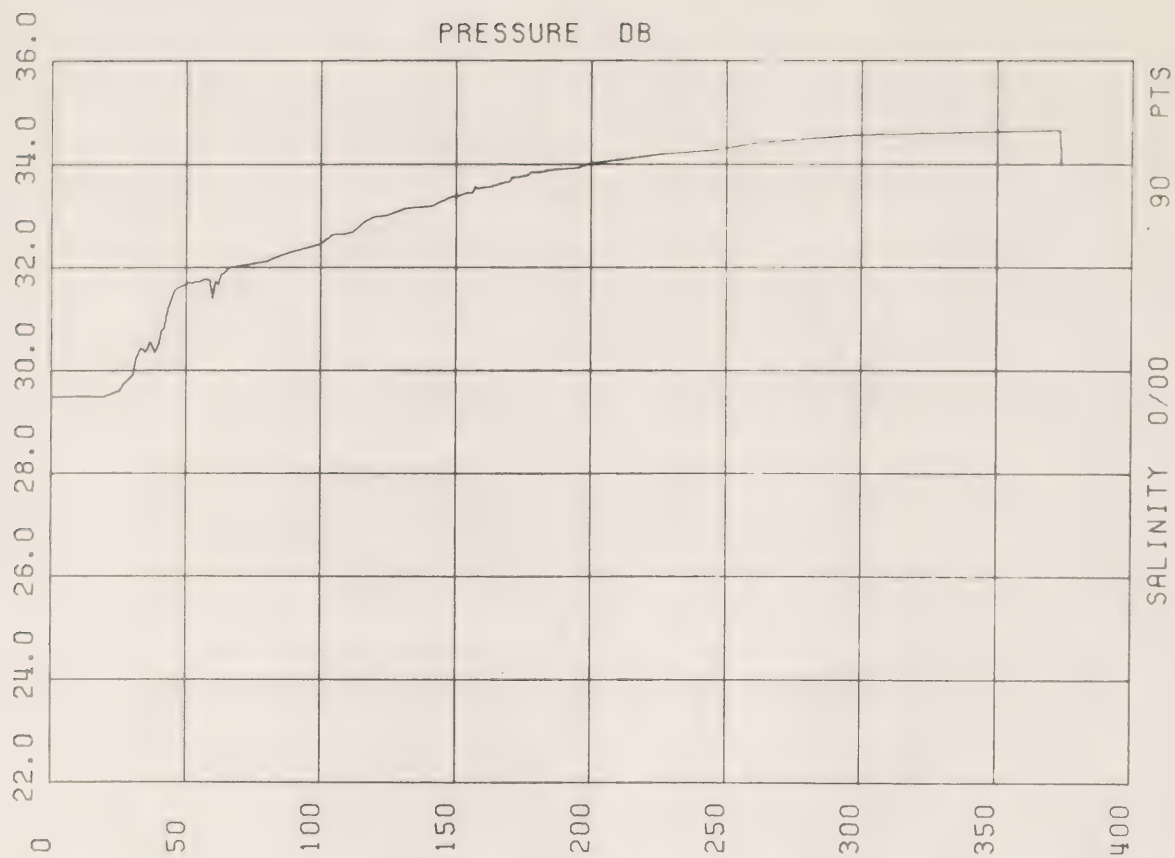
LAT N49 12.00
 LONG W 64 36.00
 DEPTH 296.0
 MARSD SQ
 YEAR 1969
 MONTH 10
 DAY 01
 H/M 2320
 WAVE-P/H
 SWEL-P/H 0604
 SWEL-D 250
 BARD 1013.0
 WIND-DIR 290
 WIND-SPD 18
 AIR-TEM 10.3
 WET-BLB 7.6
 WW 02
 CLD-A 3
 COUN 18
 INST 10
 RESTR
 UNAS GSPL2

CRUISE NUMBER 69051

STATION NUMBER 106

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	6.818A	6.817	28.342A	2224	2224	1469.8W	50	2	5606
	20.0	20.2A	6.608B	6.606	28.599C	2246	2246	1469.5A	107	11	5390
	30.0	30.2	5.500	5.498	30.259	2389	2389	1467.3	150	23	4023
	50.0	50.4A	4.033A	4.030	30.971A	2461	2461	1462.4A	224	52	3342
	75.0	75.5A	1.187D	1.184	31.882A	2555	2555	1451.6W	292	96	2438
	100.0	100.7A	1.058A	1.054	32.588A	2612	2612	1452.4A	346	144	1894
	125.0	125.9A	1.855C	1.849	33.111A	2649	2649	1457.1A	389	194	1552
	150.0	2.415A	2.415A	2.407	33.525A	2678	2678	1460.5A	425	243	1280
	175.0	176.2A	2.973A	2.962	33.837A	2698	2698	1463.8A	454	292	1094
	200.0	201.4A	3.333A	3.320	34.027A	2710	2710	1466.0A	480	343	986
	225.0	226.6A	3.514A	3.499	34.123A	2716	2716	1467.3A	504	395	933
	250.0	251.8A	3.600A	3.583	34.162A	2718	2718	1468.1A	527	451	913



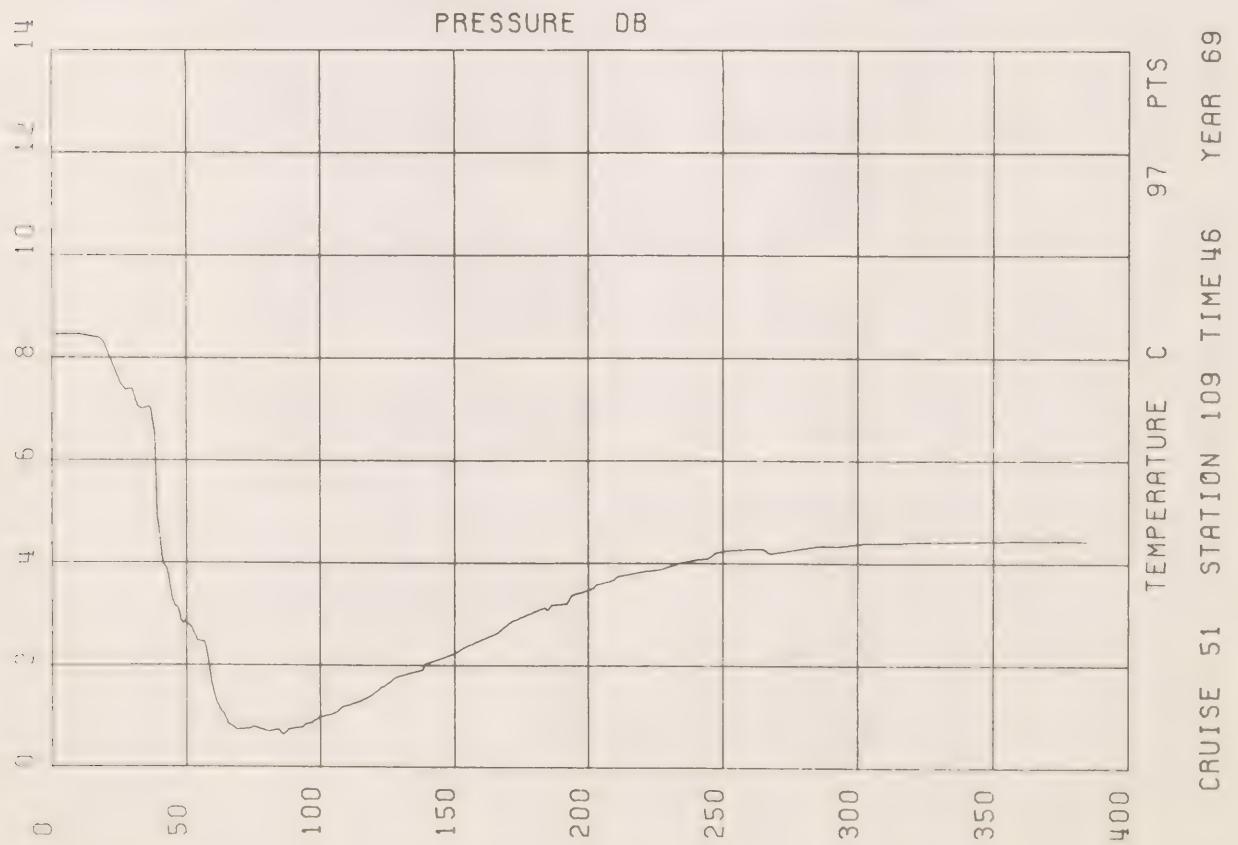
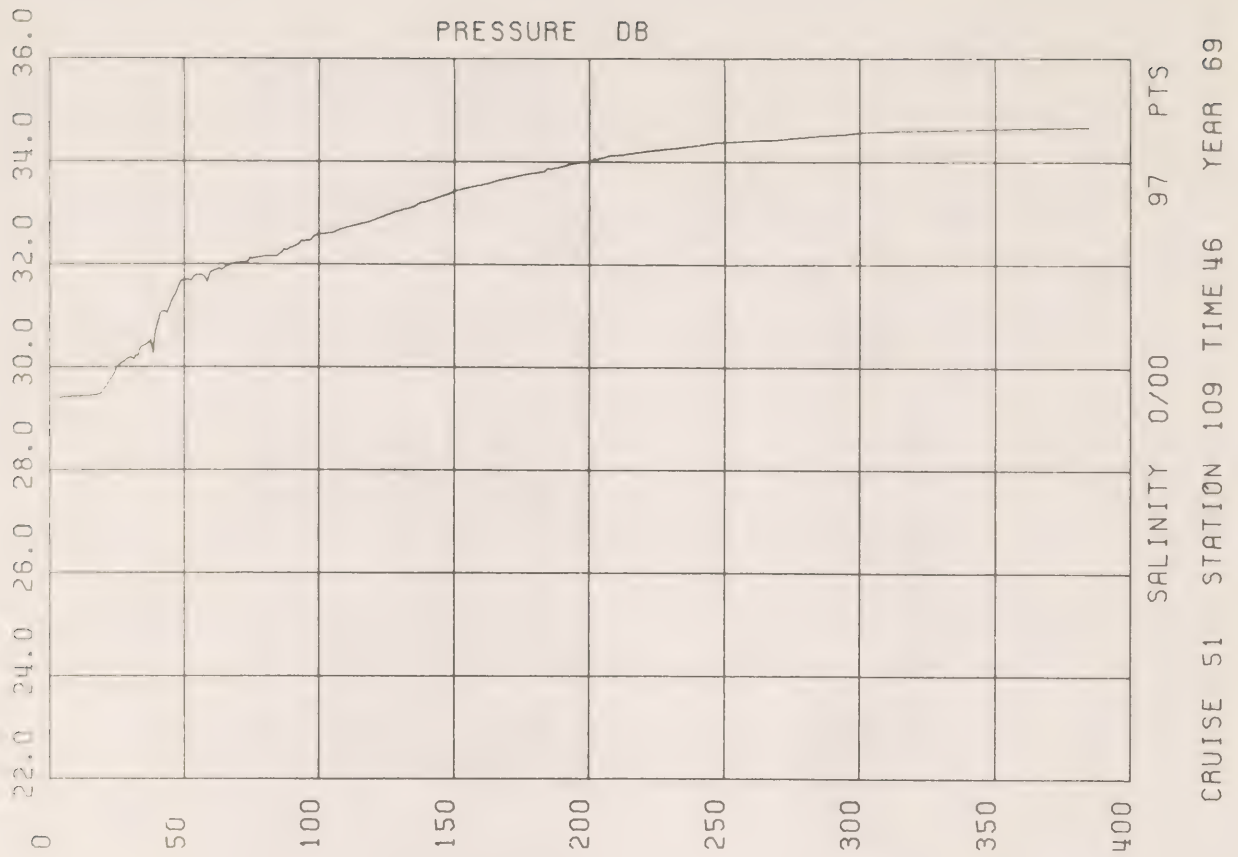
CRUISE NUMBER 69051 STATION NUMBER 108

LAT	N49	16.80	YEAR 1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	32.80	MONTH 10	SWEL-P/H	WIND-SPD	INST	10
DEPTH		380.0	DAY 02	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M 0015	BARO	WET-BLB	UNAS	GSPL2

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	0.0	0.1	8.410	8.410	29.488	2292	2292	1477.4	0	0	4949
	10.0	10.1A	8.420A	8.419	29.498A	2293	2293	1477.6W	49	2	4945
	20.0	20.2A	8.391C	8.389	29.497C	2293	2293	1477.6W	100	10	4943
	30.0	30.2A	7.789B	7.786	29.893B	2332	2332	1476.0A	148	23	4568
	50.0	50.4A	3.169A	3.166	31.689A	2526	2526	1459.7A	220	51	2726
	75.0	75.5A	0.976B	0.973	32.084A	2573	2573	1450.9A	282	92	2273
	100.0	100.7A	0.812B	0.808	32.491A	2606	2606	1451.2A	335	139	1953
	125.0	125.9A	1.773A	1.767	33.029A	2644	2644	1456.6A	380	190	1606
	150.0	151.0A	2.229A	2.221	33.387A	2668	2668	1459.5A	417	242	1370
	175.0	176.2A	2.958A	2.947	33.783A	2694	2694	1463.7A	449	295	1135
	200.0	201.4A	3.497A	3.484	34.036A	2709	2709	1466.7A	475	347	993
	225.0	226.6A	3.759B	3.743	34.202A	2720	2720	1468.5A	500	399	897
	250.0	251.8	4.070	4.052	34.326	2726	2727	1470.4	521	452	838
	300.0	302.2W	4.370W	4.347	34.572W	2743	2743	1472.8W	559	559	692

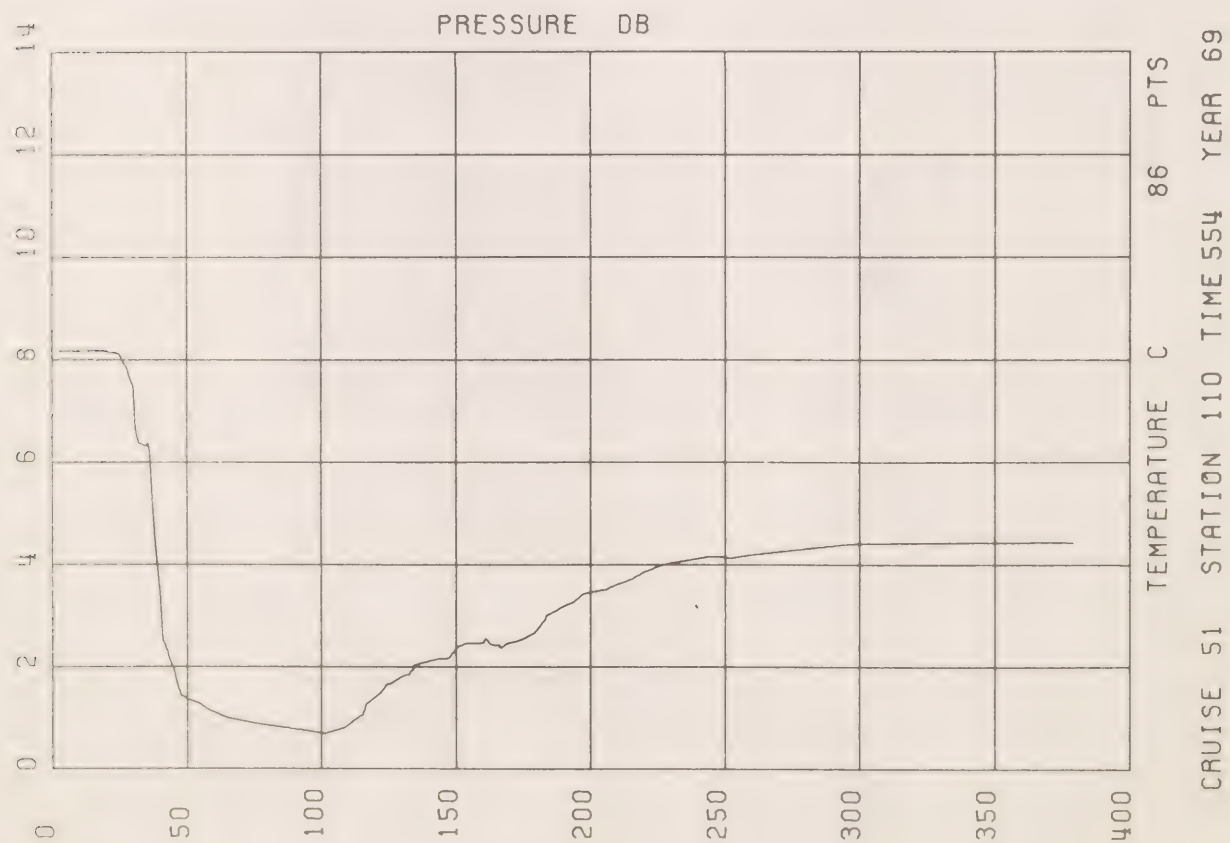
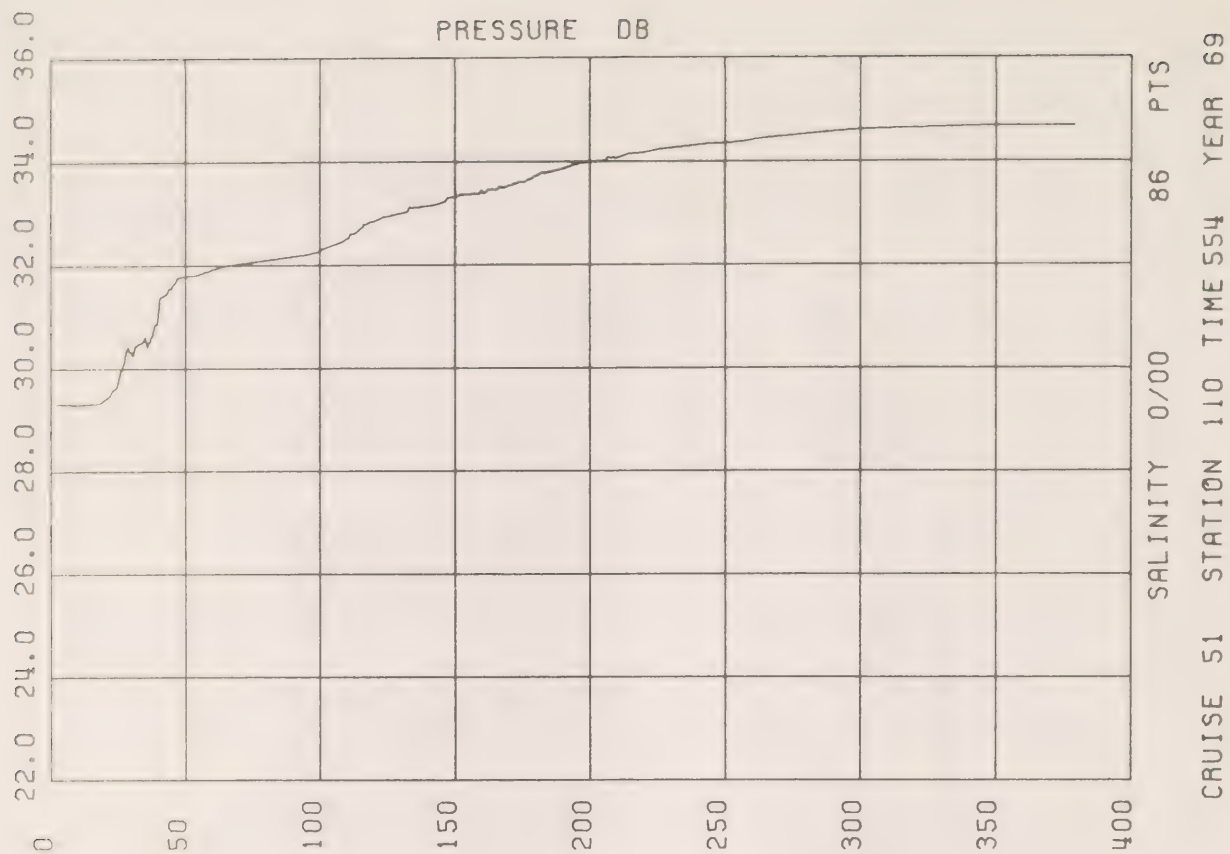


CRUISE NUMBER 69051 STATION NUMBER 109

LAT	N49	19.00	YEAR	1969	WAVE-P/H	WIND-DIR	WIND	COUN	18
LONG	W 64	31.00	MONTH	10	SWEL-P/H	WIND-SPD	CLD-A	INST	10
DEPTH		396.0	DAY	02	SWEL-D	AIR-TEM		RESTR	
MARSD	SQ		H/M	0045	BARO	WET-BLB		UNAS	GSPL2

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.449W	8.448	29.430A	2287	2287	1477.6W	44	3	4999
	20.0	20.2A	8.216A	8.214	29.557A	2300	2300	1477.0A	94	10	4874
	30.0	30.2A	7.397A	7.394	30.194A	2361	2361	1474.8A	139	22	4292
	50.0	50.4A	2.864C	2.861	31.705A	2529	2529	1458.3A	211	51	2688
	75.0	75.5A	0.791C	0.788	32.109A	2576	2576	1450.1W	273	89	2244
	100.0	100.7A	0.983B	0.979	32.592B	2614	2614	1452.1A	325	137	1887
	125.0	125.9A	1.643A	1.637	32.972A	2639	2639	1456.0A	369	189	1640
	150.0	151.0A	2.243A	2.235	33.439A	2673	2673	1459.6A	407	241	1332
	175.0	176.2A	3.945A	2.934	33.751A	2692	2692	1463.6A	439	294	1156
	200.0	201.4A	3.484B	3.471	34.045B	2710	2710	1466.7A	466	346	988
	225.0	226.6A	3.859A	3.843	34.236A	2722	2722	1468.9A	489	397	882
	250.0	251.8A	4.233A	4.215	34.391A	2730	2730	1471.1A	510	449	808
	300.0	302.2A	4.381A	4.358	34.587A	2744	2744	1472.8A	548	556	681

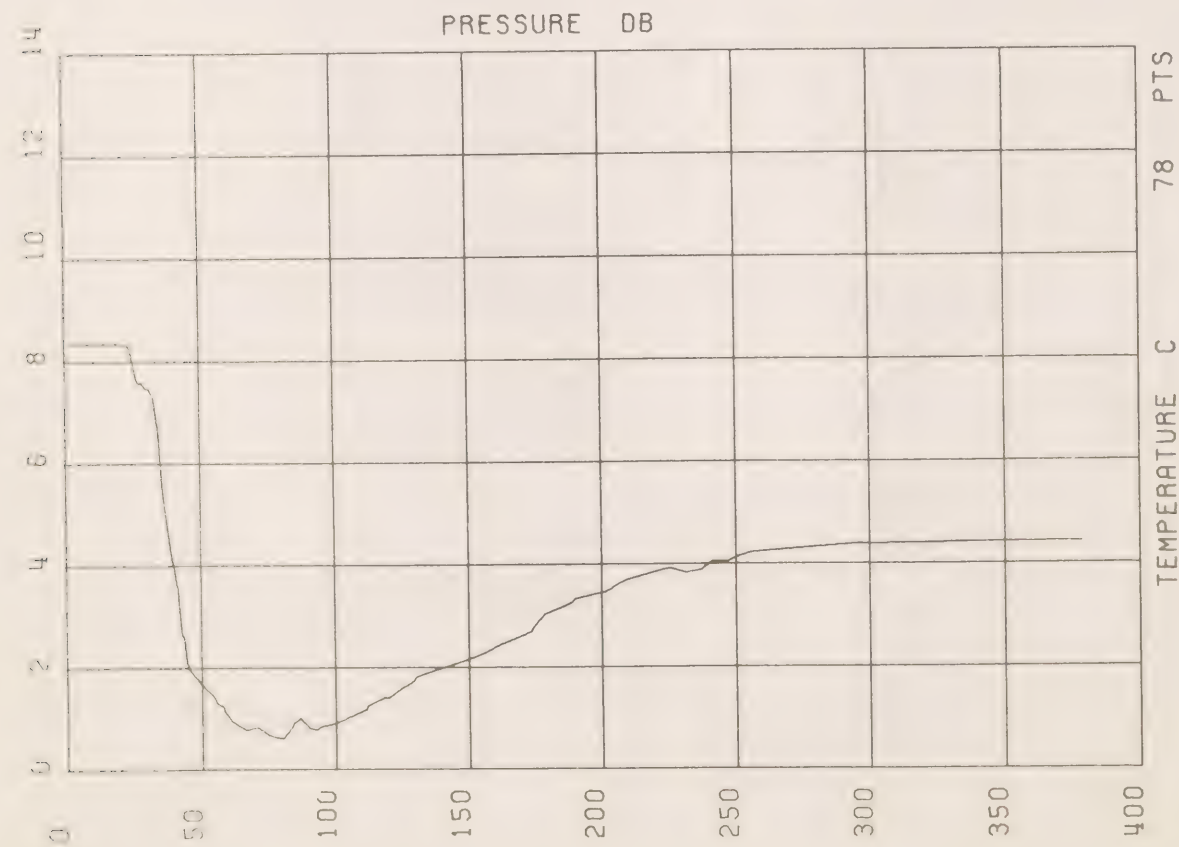
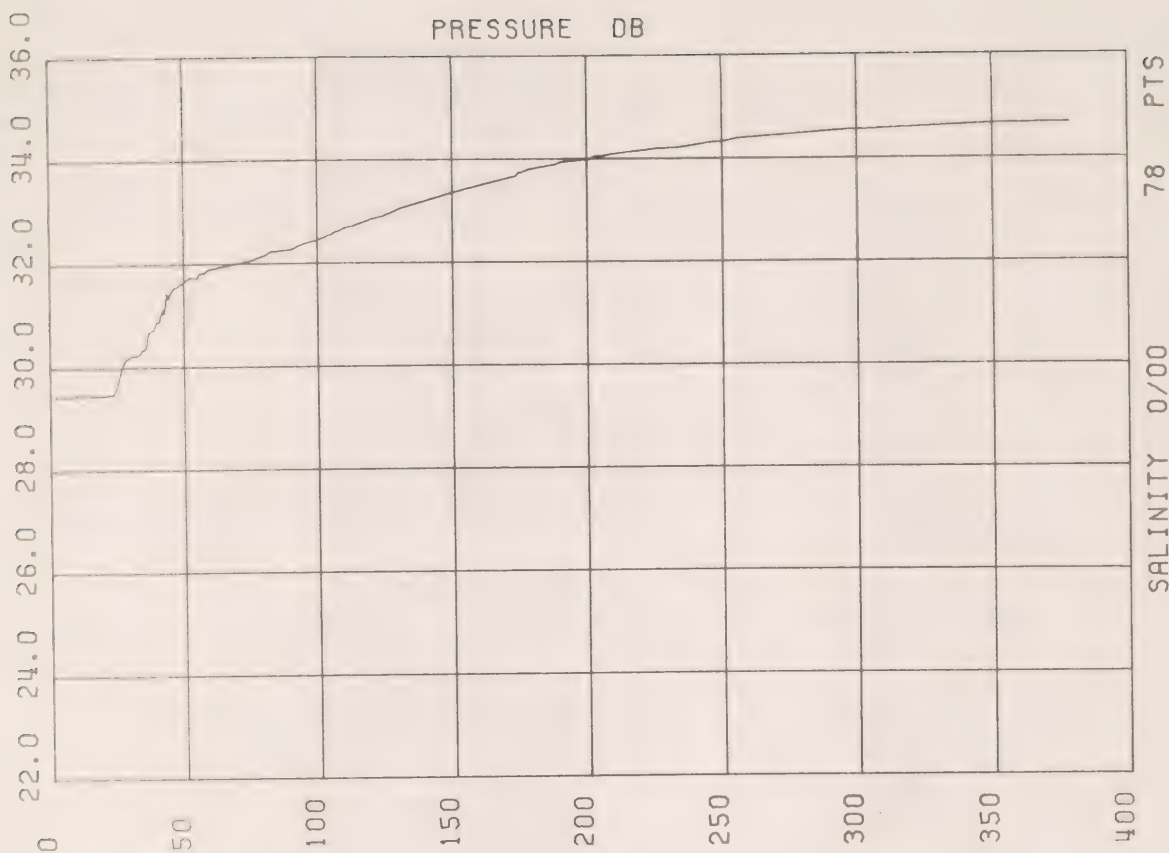


CRUISE NUMBER 69051 STATION NUMBER 110

LAT N49 19.50
 LONG W 64 22.40
 DEPTH 386.0
 MARSD SQ
 YEAR 1969
 MONTH 10
 DAY 02
 H/M 0055
 WAVE-P/H
 SWEL-P/H
 SWEL-D
 BARO 1016.0
 WIND-DIR 280
 WIND-SPD 20
 AIR-TEM 8.4
 WET-BLB 7.0
 WW 03
 CLD-A 2
 COUN 18
 INST 10
 RESTR
 UNAS GSPL3

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.161W	8.159	29.295A	2281	2281	1476.3A	41	2	5061
	20.0	20.2A	8.154W	8.152	29.400A	2288	2290	1476.6W	91	11	4984
	30.0	30.2A	7.205F	7.202	30.293C	2372	2372	1474.2A	137	22	4189
	50.0	50.4A	1.353A	1.351	31.794A	2547	2547	1451.8A	203	48	2516
	75.0	75.5A	0.885A	0.882	32.066A	2572	2572	1450.5A	263	87	2282
	100.0	100.7	0.680	0.676	32.304	2592	2592	1450.3	319	137	2088
	125.0	125.9A	1.669B	1.663	32.953A	2638	2638	1456.1A	366	191	1657
	150.0	151.0A	2.398W	2.389	33.334A	2663	2663	1460.1A	404	245	1424
	175.0	176.2A	2.571A	2.561	33.612W	2684	2684	1461.8A	438	301	1229
	200.0	201.4	3.460	3.447	33.996	2706	2706	1466.5	466	354	1021
	225.0	226.6A	3.982W	3.966	34.234A	2720	2720	1469.4A	490	407	897
	250.0	251.8A	4.112W	4.094	34.357A	2729	2729	1470.6W	512	460	820
	300.0	302.2A	4.410A	4.387	34.616A	2746	2746	1473.0A	548	563	663



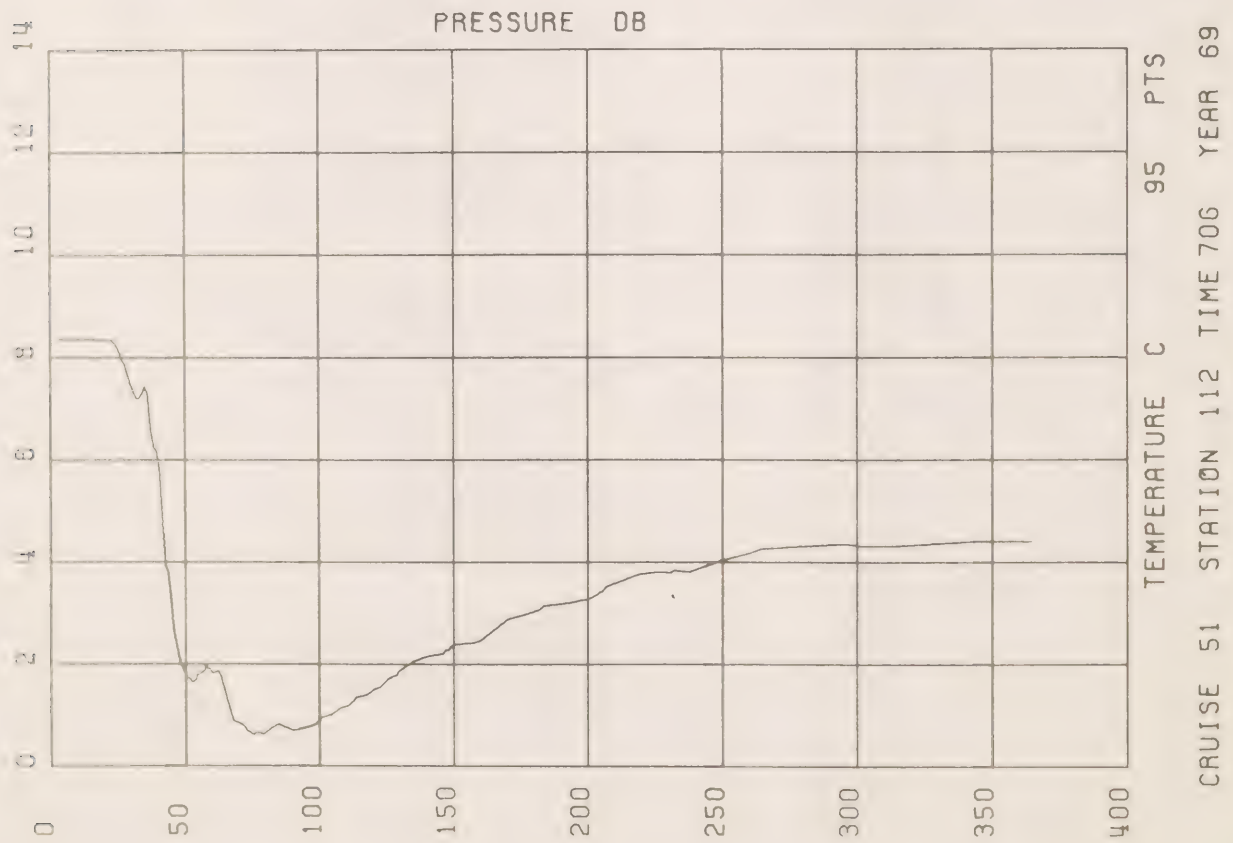
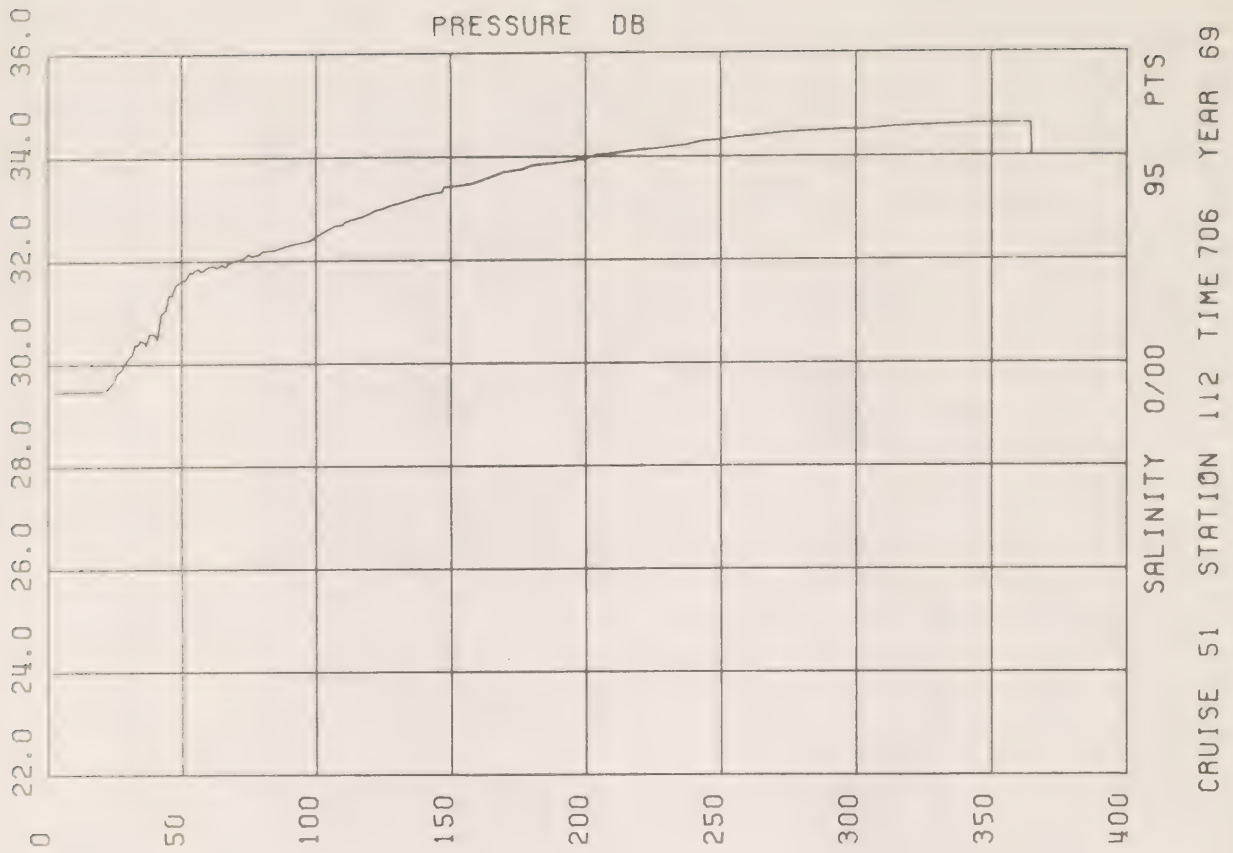
CRUISE NUMBER 69051 STATION NUMBER 111

LAT	N49	17.30	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	24.50	MONTH	10	SWEL-P/H	WIND-SPD	INST	10
DEPTH		386.0	DAY	02	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	0632	BARO	WET-BLB	UNAS	GSPL3

WW
CLD--A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.350W	8.349	29.453A	2290	2290	1477.2A	39	2	4969
	20.0	20.2A	8.349W	8.347	29.457B	2290	2290	1477.4A	89	10	4966
	30.0	30.2A	7.505A	7.502	30.224A	2362	2362	1475.2A	136	22	4284
	50.0	50.4A	1.680A	1.678	31.664A	2535	2535	1453.1A	205	50	2634
	75.0	75.5A	0.677A	0.674	32.060A	2572	2572	1449.5W	266	88	2274
	100.0	100.7A	0.897A	0.893	32.466A	2604	2604	1451.5A	320	137	1978
	125.0	125.9A	1.593B	1.587	32.942A	2638	2638	1455.7A	365	189	1660
	150.0	151.0A	2.153A	2.145	33.371A	2668	2668	1459.2A	403	242	1377
	175.0	176.2A	2.852A	2.841	33.743B	2692	2692	1463.1A	435	295	1153
	200.0	201.4A	3.451A	3.438	33.998A	2706	2706	1466.5A	462	347	1018
	225.0	226.6A	3.898A	3.882	34.195A	2718	2718	1469.0A	486	400	917
	250.0	251.8A	4.140A	4.122	34.344A	2727	2727	1470.7A	508	453	833
	300.0	302.2A	4.381A	4.358	34.550A	2741	2741	1472.8A	546	561	709

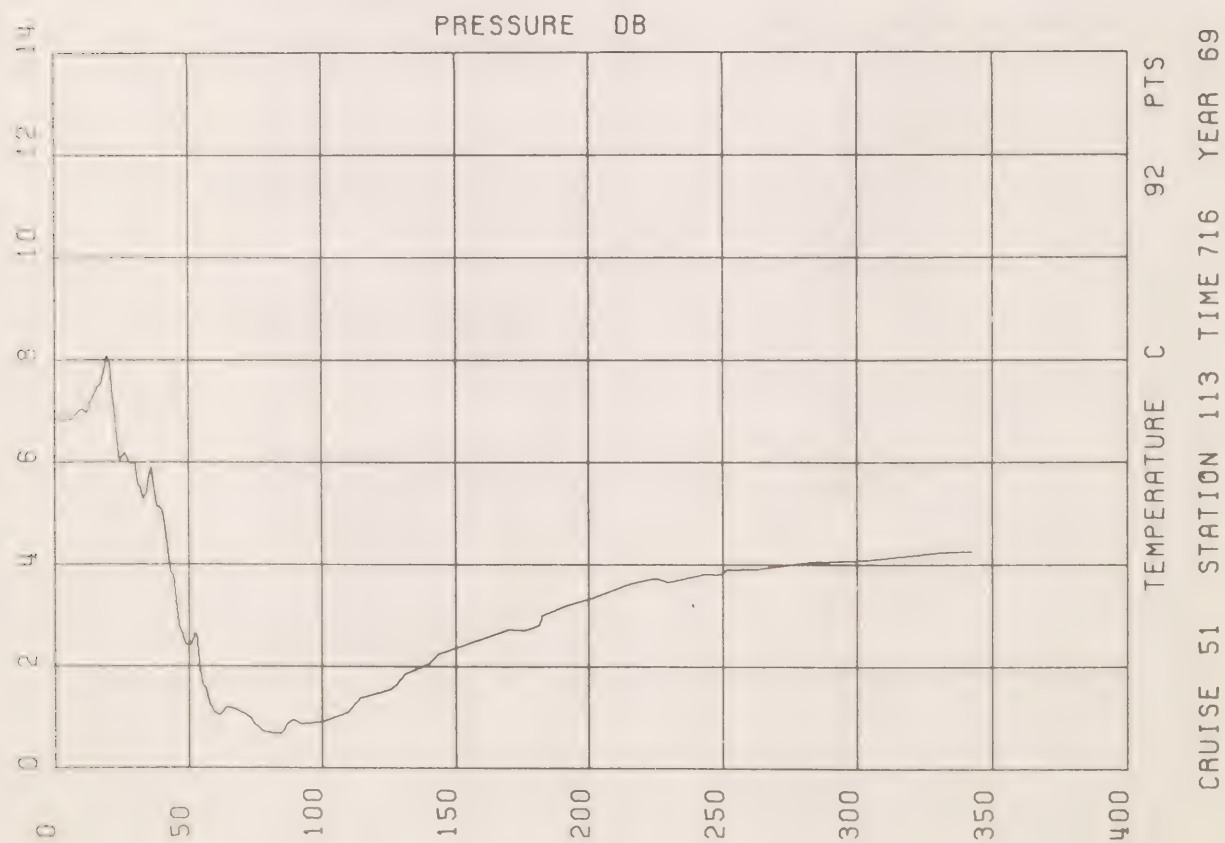
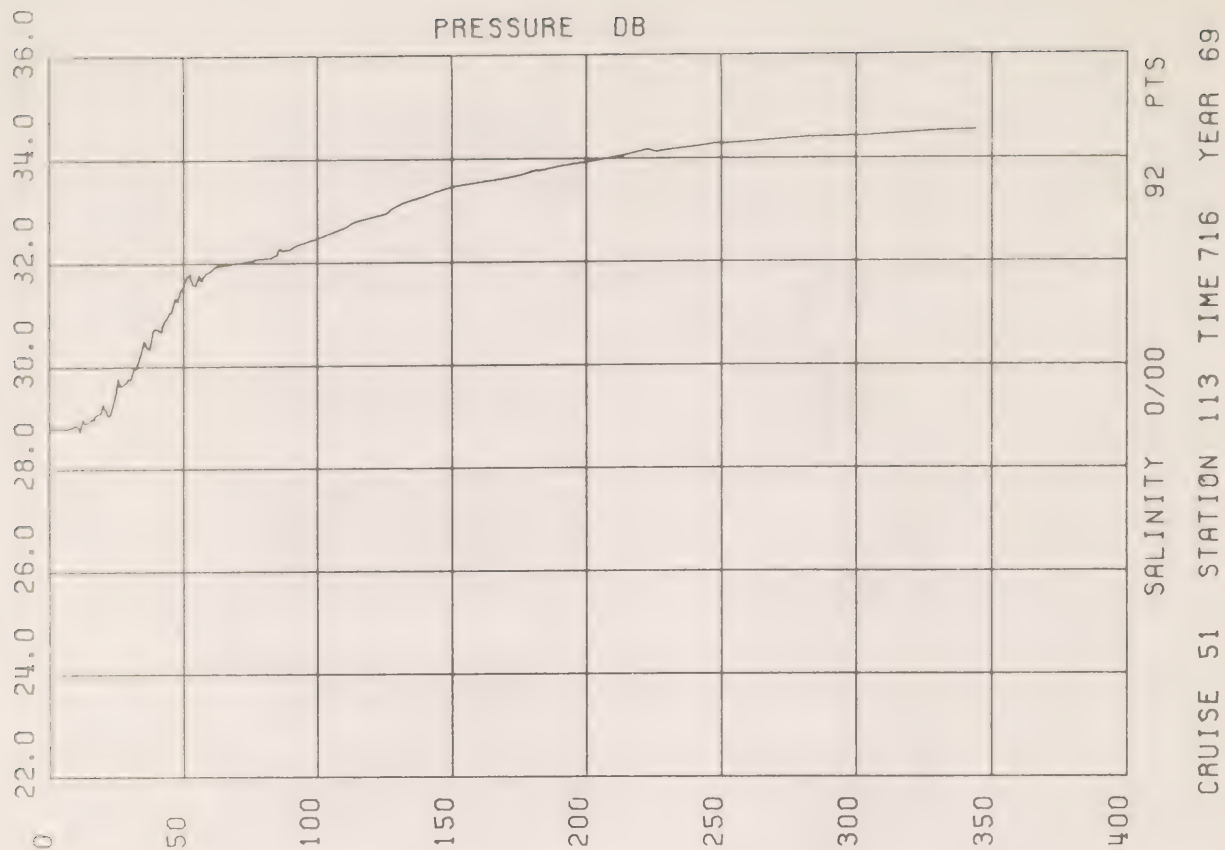


CRUISE NUMBER 69051 STATION NUMBER 112

LAT	N49	15.20	YEAR	1969	WAVE-P/H	WIND-DIR	WW	COUN	18
LONG	W 64	27.00	MONTH	10	SWEL-P/H	WIND-SPD	CLD-A	INST	10
DEPTH		370.0	DAY	02	SWEL-D	AIR-TEM		RESTR	
MARSD	SQ		H/M	0706	BARO	WET-BLB		UNAS	GSPL3

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.350W	8.349	29.471A	2292	2292	1477.3A	37	2	4955
	20.0	20.2A	8.348W	8.347	29.485B	2293	2293	1477.4W	87	10	4946
	30.0	30.2A	7.360D	7.357	30.127C	2357	2357	1474.6A	134	22	4339
	50.0	50.4A	1.739C	1.737	31.644C	2533	2533	1453.4A	206	51	2654
	75.0	75.5A	0.625C	0.622	32.115C	2577	2577	1449.4W	267	90	2230
	100.0	100.7A	0.950B	0.946	32.492A	2606	2606	1451.8A	321	138	1961
	125.0	125.9A	1.712A	1.706	33.027A	2643	2643	1456.4A	365	189	1604
	150.0	151.0A	2.377C	2.369	33.431A	2671	2671	1460.3A	402	242	1351
	175.0	176.2A	2.952A	2.941	33.754A	2692	2692	1463.6A	434	294	1155
	200.0	201.4A	3.303A	3.290	33.977A	2706	2706	1465.8A	461	346	1021
	225.0	226.6A	3.790A	3.774	34.158A	2716	2716	1468.5A	485	400	934
	250.0	251.8A	4.059A	4.041	34.349A	2729	2729	1470.3A	508	454	820
	300.0	302.2A	4.301A	4.278	34.514A	2739	2739	1472.4A	546	562	727

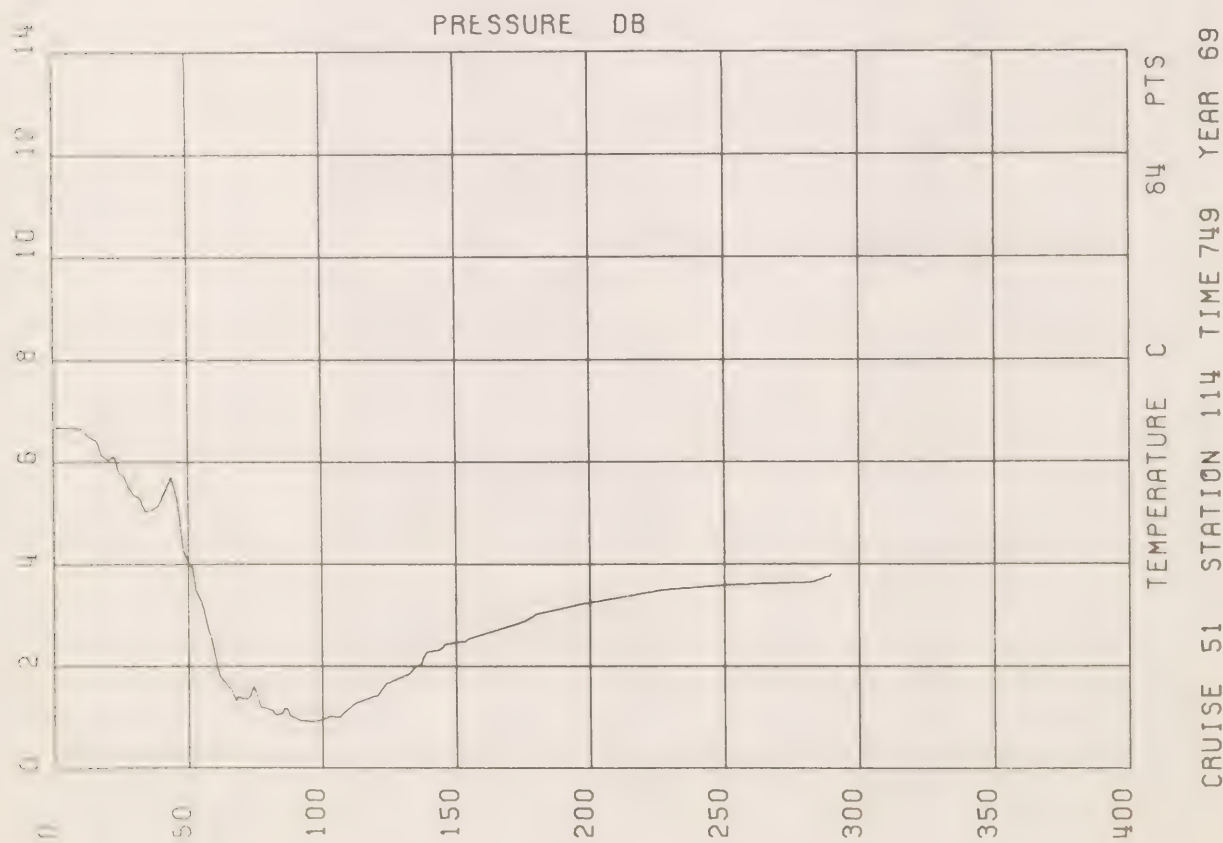
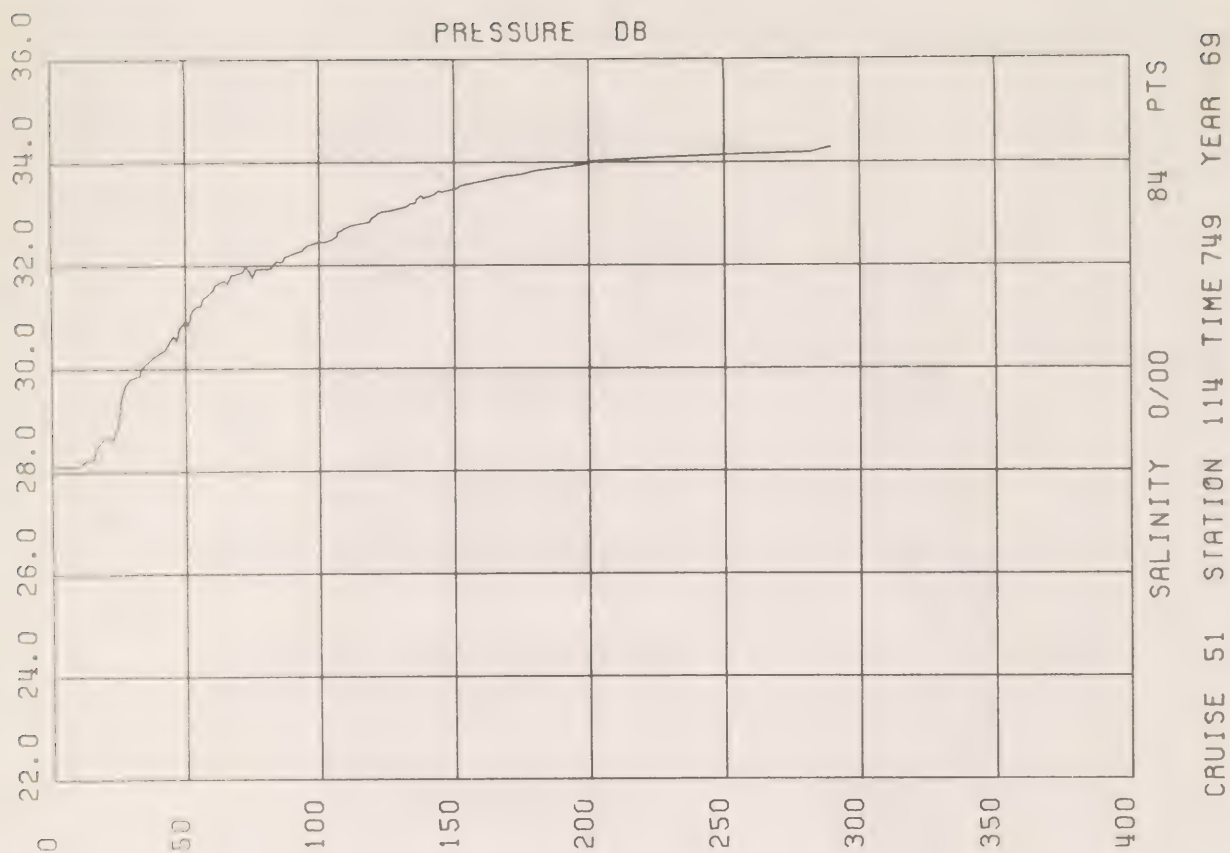


CRUISE NUMBER 69051 STATION NUMBER 113

LAT	N49	12.80	YEAR	1969	WAVE-P/H	WIND-DIR	270	WW	COUN	18
LONG	W 64	29.00	MONTH	10	SWEL-P/H	WIND-SPD	18	CLD-A	INST	10
DEPTH		358.0	DAY	02	SWEL-D	AIR-TEM			RESTR	
MARSD	SQ		H/M	0740	BARO	1015.2	WET-BLB		UNAS	GSPL3

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	7.040C	7.039	28.857C	2261	2261	1471.3A	49	3	5247
	20.0	20.2A	8.087A	8.085	29.226B	2277	2277	1475.9W	101	11	5103
	30.0	30.2A	6.025W	6.023	29.745B	2342	2343	1468.8A	149	23	4467
	50.0	50.4A	2.384C	2.381	31.612C	2526	2526	1456.1A	221	52	2724
	75.0	75.5A	0.822B	0.819	32.048B	2571	2571	1450.2A	282	92	2294
	100.0	100.7A	0.904A	0.900	32.489A	2605	2605	1451.5A	336	140	1960
	125.0	125.9A	1.535A	1.529	32.960A	2640	2640	1455.4A	381	191	1643
	150.0	151.0A	2.359A	2.351	33.474A	2674	2674	1460.3A	418	242	1314
	175.0	176.2A	2.703B	2.693	33.692A	2689	2689	1462.4A	449	295	1180
	200.0	201.4	3.330	3.317	33.941	2703	2703	1465.9	477	348	1050
	225.0	226.6A	3.693A	3.678	34.134A	2715	2715	1468.1A	501	402	943
	250.0	251.8A	3.888C	3.870	34.288A	2725	2725	1469.5A	524	457	847
	300.0	302.2A	4.071A	4.049	34.425A	2734	2735	1471.3A	564	569	770



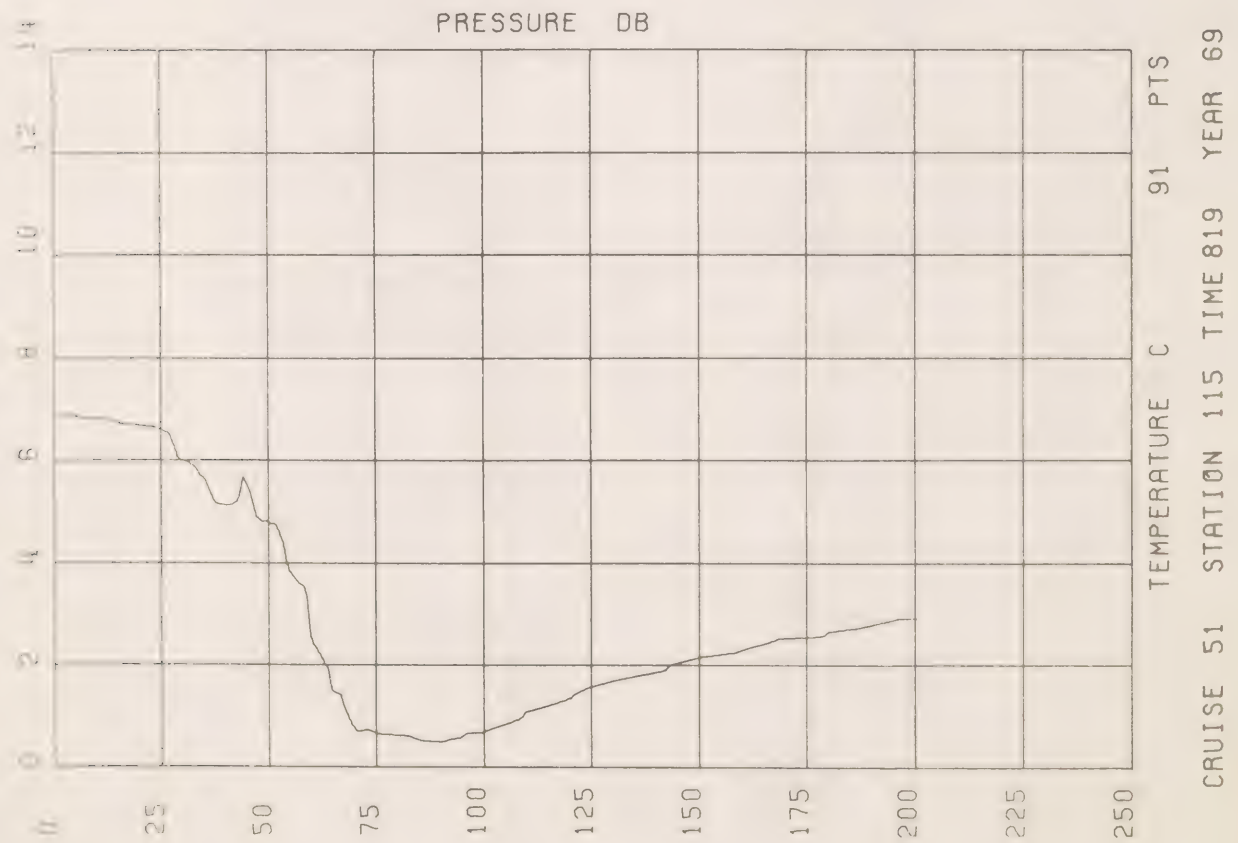
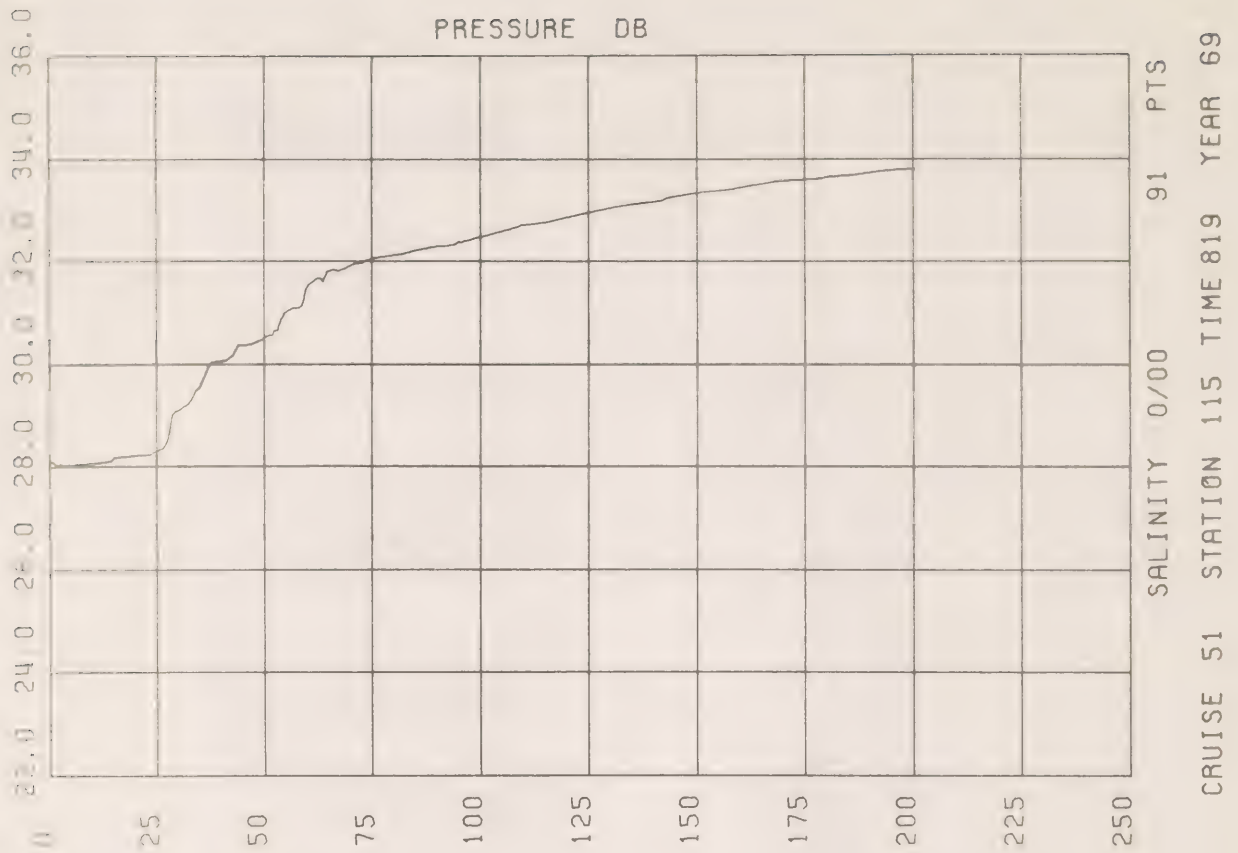
CRUISE NUMBER 69051 STATION NUMBER 114

LAT	N49	10.30	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	31.10	MONTH	10	SWEL-P/H	WIND-SPD	INST	10
DEPTH		297.0	DAY	02	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	0811	BARO	WET-BLB	UNAS	GSPL 3

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	6.635B	6.634	28.114A	2208	2208	1468.8A	56	3	5758
	20.0	20.2A	6.042B	6.040	28.667A	2258	2258	1467.2A	112	11	5278
	30.0	30.2A	5.325B	5.323	29.822A	2357	2357	1465.9A	160	24	4336
	50.0	50.4A	3.985C	3.982	30.908D	2456	2456	1462.1A	239	57	3386
	75.0	75.5A	1.395B	1.392	31.797W	2547	2547	1452.4A	308	100	2527
	100.0	100.7A	0.967A	0.963	32.460A	2603	2603	1451.8A	364	150	1986
	125.0	125.9A	1.697A	1.691	33.051A	2646	2646	1456.3A	408	201	1585
	150.0	151.0A	2.459W	2.452	33.492A	2675	2675	1460.7A	445	252	1309
	175.0	176.2A	2.895A	2.884	33.777A	2694	2695	1463.3A	475	302	1132
	200.0	201.4	3.250	3.237	34.020	2710	2710	1465.6	502	354	983
	225.0	226.6A	3.483A	3.468	34.090A	2714	2714	1467.1A	526	406	954
	250.0	251.8A	3.571A	3.554	34.148A	2717	2717	1468.0A	549	464	922

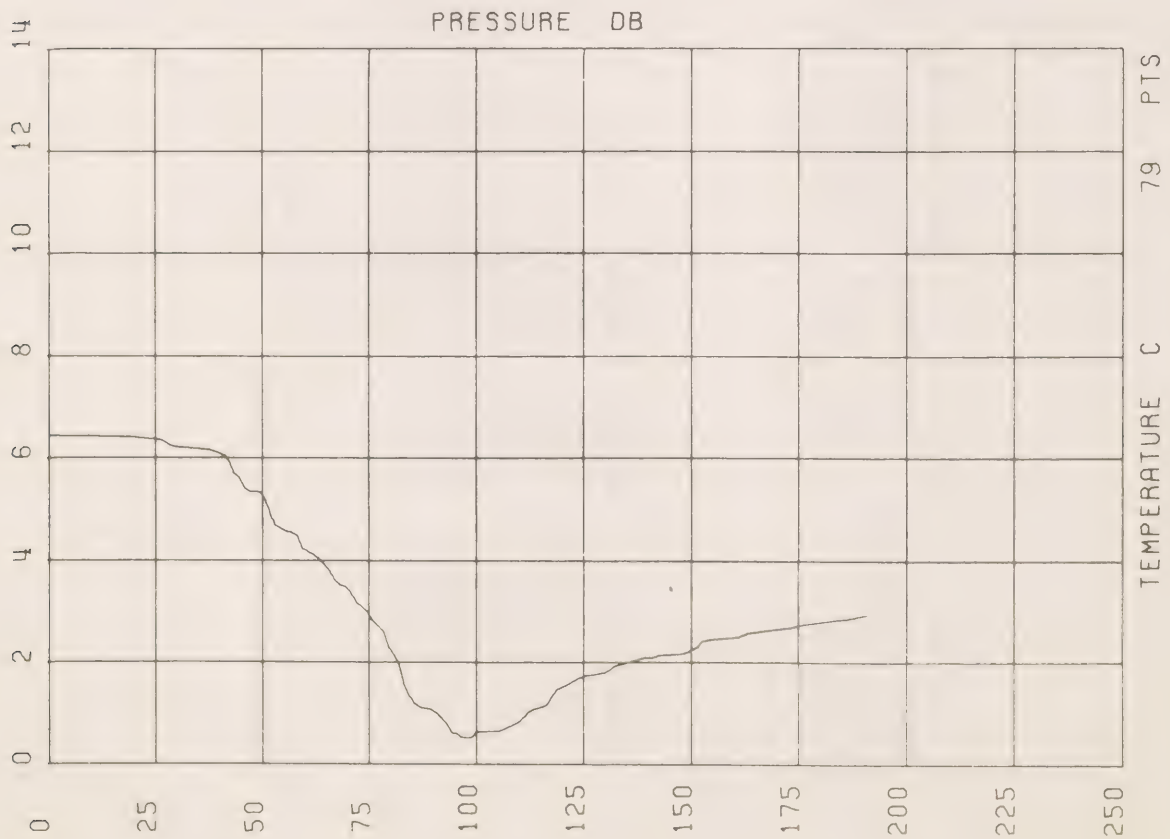
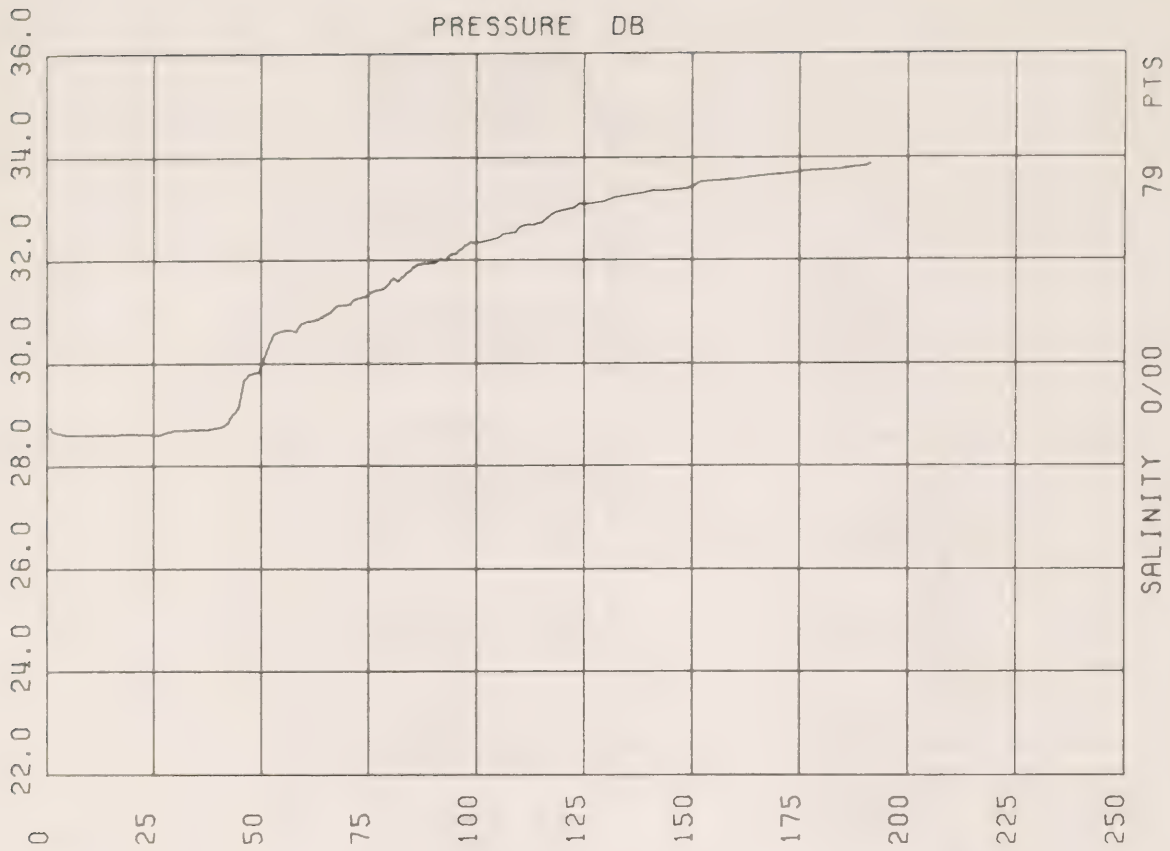


CRUISE NUMBER 69051 STATION NUMBER 115
 LAT N49 8.00 YEAR 1969 WAVE-P/H 0505 WIND-DIR 300 WW 02
 LONG W 64 33.60 MONTH 10 SWEL-P/H 280 WIND-SPD 18 CLD-A 2
 DEPTH 260.0 DAY 02 SWEL-D 280 AIR-TEM 8.0
 MARSD SQ H/M 0842 BARO 1019.2 WET-BLB 6.0

COUN 18
 INST 10
 RESTR
 UNAS GSPL3

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	6.818A	6.817	28.050A	2200	2200	1469.4W	56	3	5828
	20.0	20.2A	6.683A	6.681	28.207A	2215	2215	1469.2W	115	12	5694
	30.0	30.2	6.000	5.998	29.097	2292	2292	1467.8	169	26	4949
	50.0	50.4A	4.760W	4.756	30.535A	2419	2419	1464.9W	255	60	3740
	75.0	75.5A	0.650C	0.647	32.070B	2574	2574	1449.5W	325	105	2266
	100.0	100.7A	0.712B	0.708	32.488A	2607	2607	1450.7A	378	153	1950
	125.0	125.9A	1.596A	1.590	32.967A	2639	2639	1455.7A	424	205	1642
	150.0	151.0A	2.160W	2.152	33.351A	2666	2666	1459.2A	461	258	1392
	175.0	176.2	2.550	2.540	33.595	2683	2683	1461.6	494	313	1241

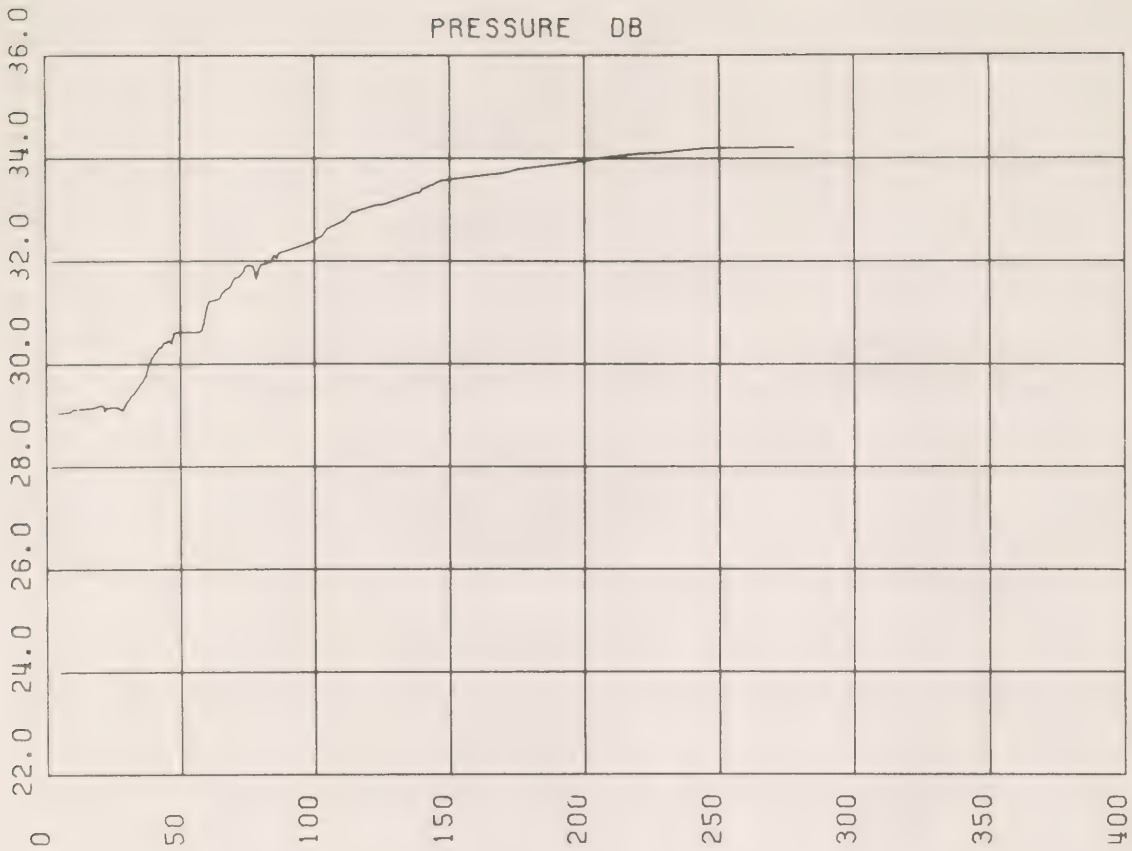


CRUISE NUMBER 69051		STATION NUMBER 116	
LAT N49	5.80	YEAR 1969	WAVE-P/H 0403
LONG W 64	28.70	MONTH 10	SWEL-P/H
DEPTH	198.0	DAY 02	SWEL-D
MARSD SQ		H/M 1703	BARO 1019.5
			WET-BLB
		WIND-DIR 300	WW 02
		WIND-SPD 18	CLD-A 2
		AIR-TEM 8.8	
		WET-BLB 6.4	
			COUN 18
			INST 10
			RESTR
			UNAS GSPL4

INTERPOLATED

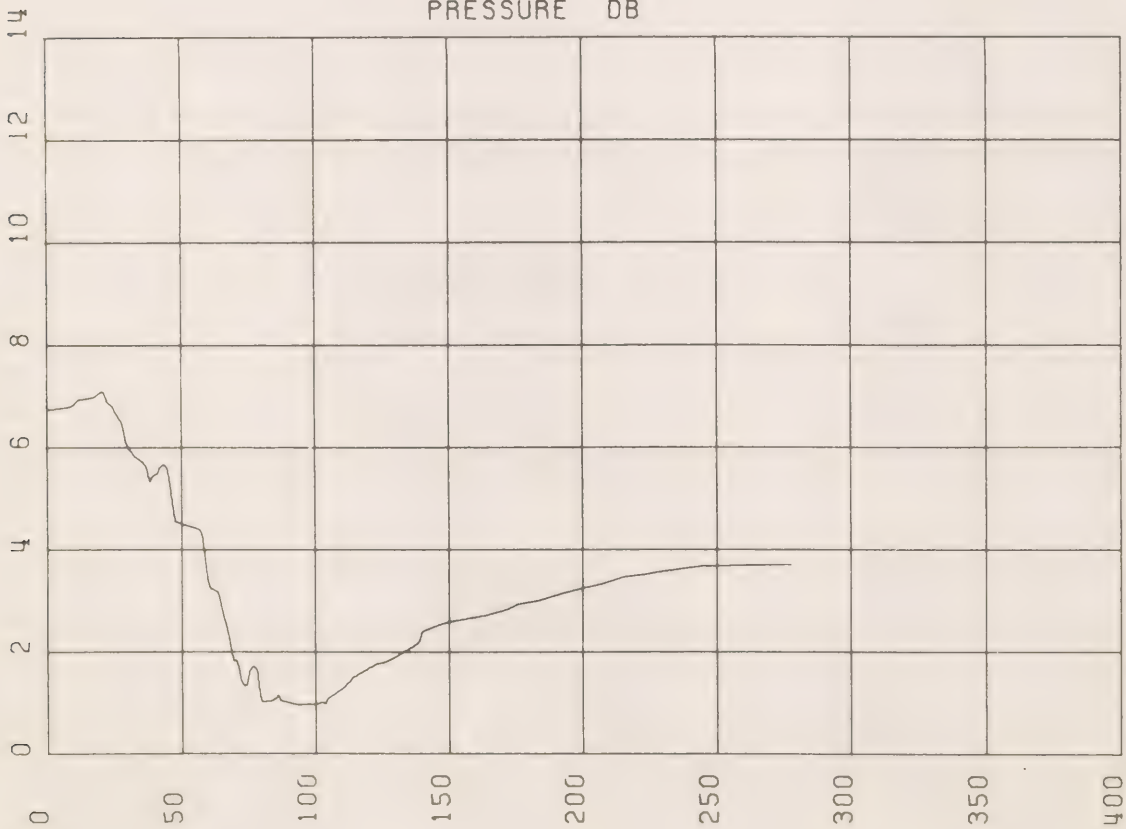
GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	6.428W	6.428	28.592A	2248	2248	1468.5W	51	3	5375
	20.0	20.2A	6.408A	6.406	28.603A	2249	2249	1468.6W	105	12	5365
	30.0	30.2A	6.205C	6.203	28.690C	2258	2258	1468.1W	159	25	5278
	50.0	50.4A	5.242W	5.253	30.016B	2373	2373	1466.3A	259	66	4181
	75.0	75.5A	2.847A	2.843	31.365A	2503	2503	1458.2A	345	121	2944
	100.0	100.7A	0.633E	0.629	32.310A	2593	2593	1450.2A	407	175	2086
	125.0	125.9A	1.746A	1.740	33.080A	2648	2648	1456.5A	452	228	1566
	150.0	151.0A	2.274A	2.266	33.479A	2675	2675	1459.9A	488	279	1304
	175.0	176.2A	2.754W	2.744	33.730A	2691	2692	1462.7W	519	330	1155

PRESSURE DB



SALINITY 0/00 86 PTS
CRUISE 51 STATION 117 TIME 1728 YEAR 69

PRESSURE DB



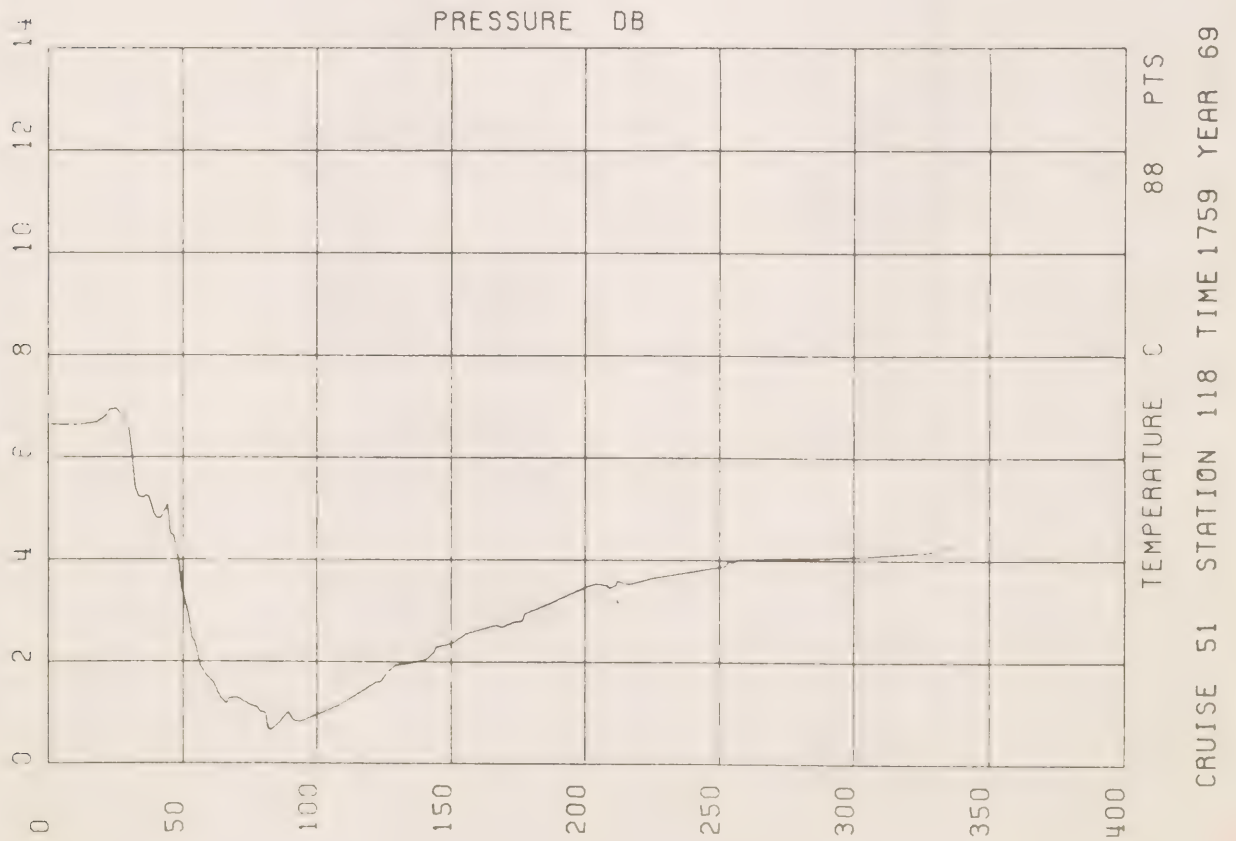
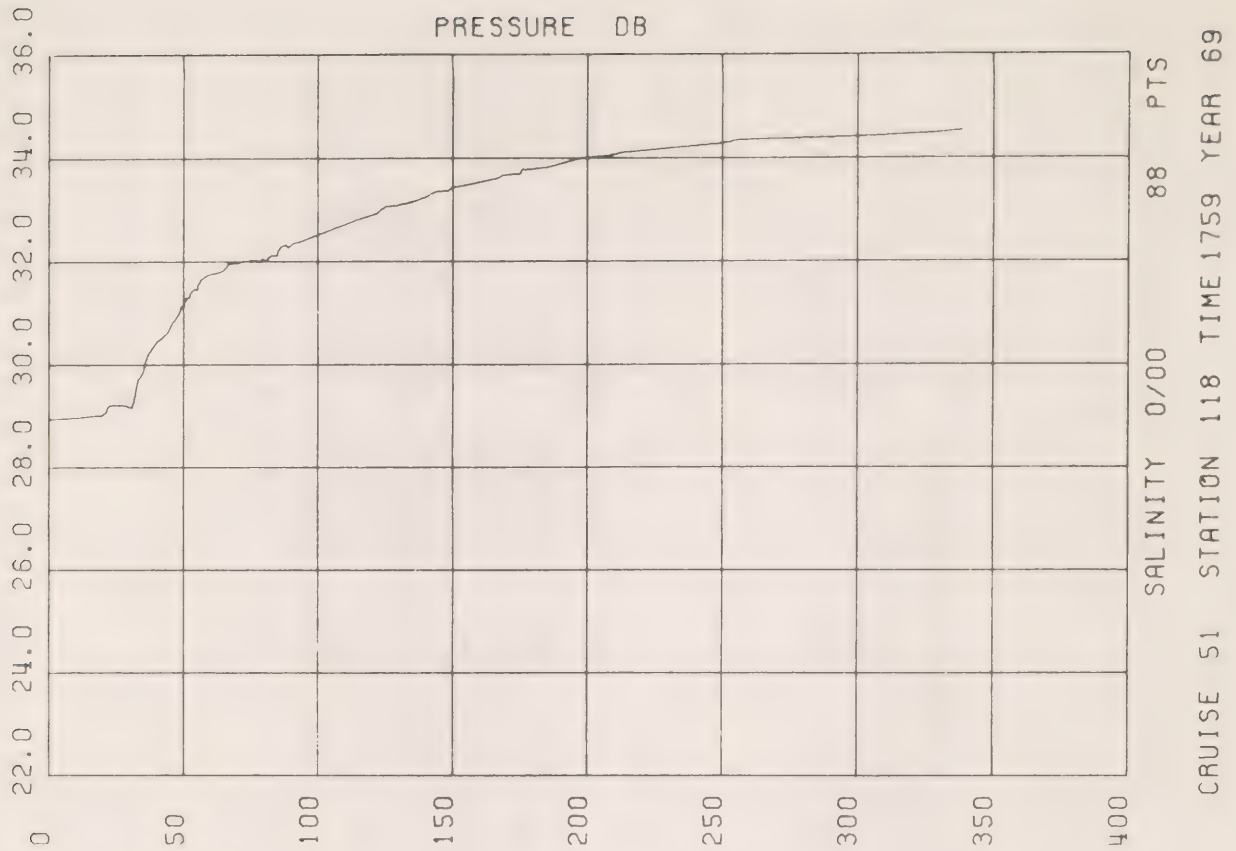
TEMPERATURE C 86 PTS
CRUISE 51 STATION 117 TIME 1728 YEAR 69

CRUISE NUMBER 69051 STATION NUMBER 117

LAT N49 8.00
 LONG W 64 26.50
 DEPTH 286.0
 MARSD SQ
 YEAR 1969
 MONTH 10
 DAY 02
 H/M 1728
 WAVE-P/H 0403
 SWEL-P/H
 SWEL-D
 BARO 1019.5
 WIND-DIR 300
 WIND-SPD 18
 AIR-TEM 7.5
 WET-BLB 5.5
 WW 02
 CLD-A 2
 COUN 18
 INST 10
 RESTR
 UNAS GSPL4

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	6.825A	6.824	29.113A	2284	2284	1470.8A	47	2	5031
	20.0	20.2A	7.083A	7.081	29.192A	2287	2287	1472.1A	97	10	5002
	30.0	30.2A	6.010A	6.008	29.273A	2306	2306	1468.1A	147	24	4819
	50.0	50.4A	4.493C	4.490	30.621B	2428	2428	1463.8A	231	58	3649
	75.0	75.5A	1.639B	1.636	31.920A	2556	2556	1453.6A	310	106	2435
	100.0	100.7A	0.972W	0.968	32.417B	2600	2600	1451.8W	367	158	2019
	125.0	125.9A	1.773A	1.767	33.108A	2649	2649	1456.7A	409	207	1547
	150.0	151.0A	2.581A	2.572	33.595A	2682	2682	1461.3A	444	256	1242
	175.0	176.2A	2.928B	2.917	33.797A	2695	2695	1463.5A	475	306	1119
	200.0	201.4A	3.244A	3.231	33.959A	2706	2706	1465.6A	501	358	1028
	225.0	226.6A	3.544A	3.529	34.104A	2714	2714	1467.4A	526	412	950
	250.0	251.8W	3.670W	3.653	34.204W	2721	2721	1468.5W	549	468	890



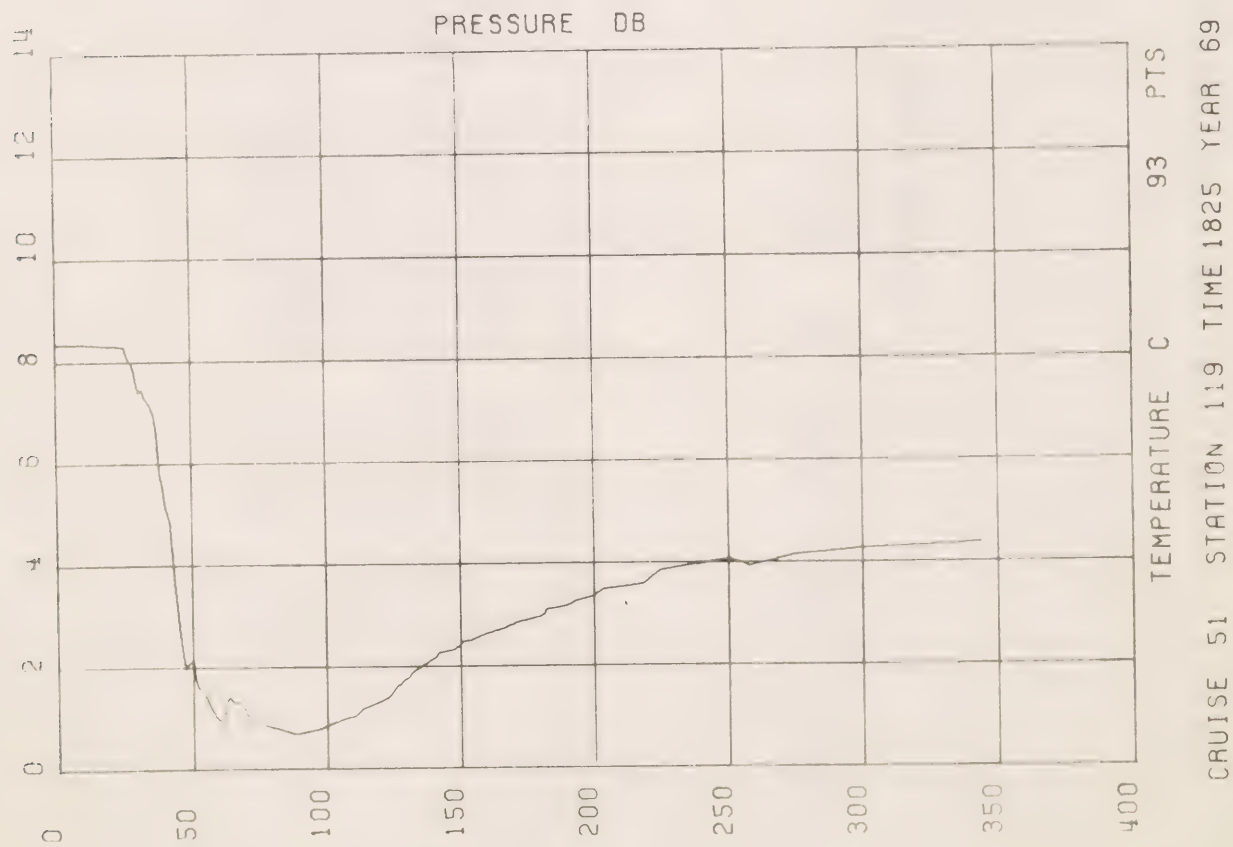
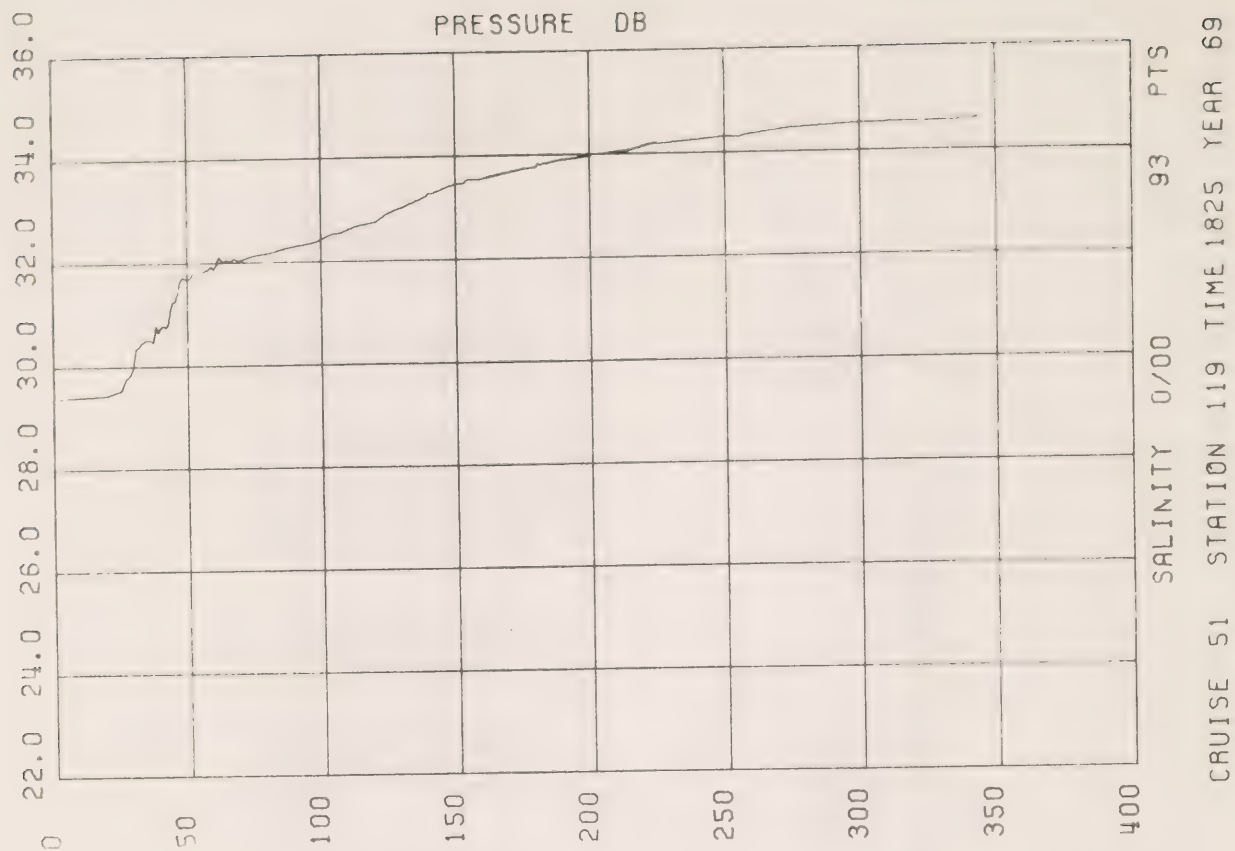
CRUISE NUMBER 69051 STATION NUMBER 118

LAT	N49	10.30	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	24.00	MONTH	10	SWEL-P/H	WIND-SPD	INST	10
DEPTH		348.0	DAY	02	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	1759	BARO	WET-BLB	UNAS	GSPL4

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	6.632W	6.630	28.965W	2274	2274	1469.8A	49	2	5119
	20.0	20.2A	6.764A	6.762	29.030W	2277	2277	1470.6A	100	11	5095
	30.0	30.2A	6.409C	6.407	29.160C	2292	2292	1469.5A	150	23	4952
	50.0	50.4A	3.239A	3.236	31.162A	2483	2483	1459.2A	229	55	3130
	75.0	75.5A	1.137B	1.134	32.026A	2567	2567	1451.6A	293	97	2326
	100.0	100.7A	0.964A	0.960	32.534A	2609	2609	1451.9A	347	144	1930
	125.0	125.9A	1.774A	1.768	33.068A	2646	2646	1456.7A	391	195	1578
	150.0	151.0A	2.377B	2.369	33.442A	2671	2671	1460.3A	429	247	1341
	175.0	176.2A	2.787A	2.776	33.794B	2696	2697	1462.9A	460	300	1114
	200.0	201.4A	3.476A	3.463	34.017A	2708	2708	1466.6W	487	353	1006
	225.0	226.6A	3.646A	3.631	34.176A	2719	2719	1467.9A	511	405	906
	250.0	251.8A	3.864A	3.846	34.302A	2727	2727	1469.4W	534	459	835
	300.0	302.2A	4.062A	4.040	34.418A	2734	2734	1471.2A	574	572	774



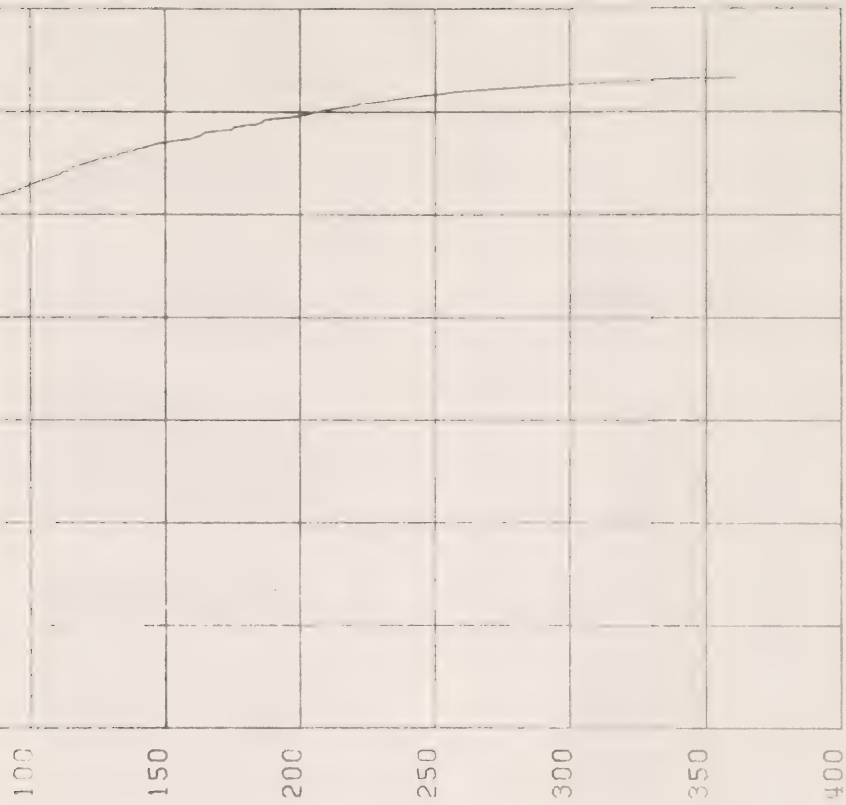
CRUISE NUMBER 69051 STATION NUMBER 119

LAT N49 12.80 YEAR 1969 WAVE-P/H 0403 WIND-DIR 290 COUN 18
 LONG W 64 22.00 MONTH 10 SWEL-P/H 18 WIND-SPD 18 INST 10
 DEPTH 350.0 DAY 02 SWEL-D 7.7 AIR-TEM 7.7 RESTR
 MARSQ SQ H/M 1826 BARO 1019.0 WET-BLB 5.5 UNAS GSPL4

I N T E R P O L A T E D

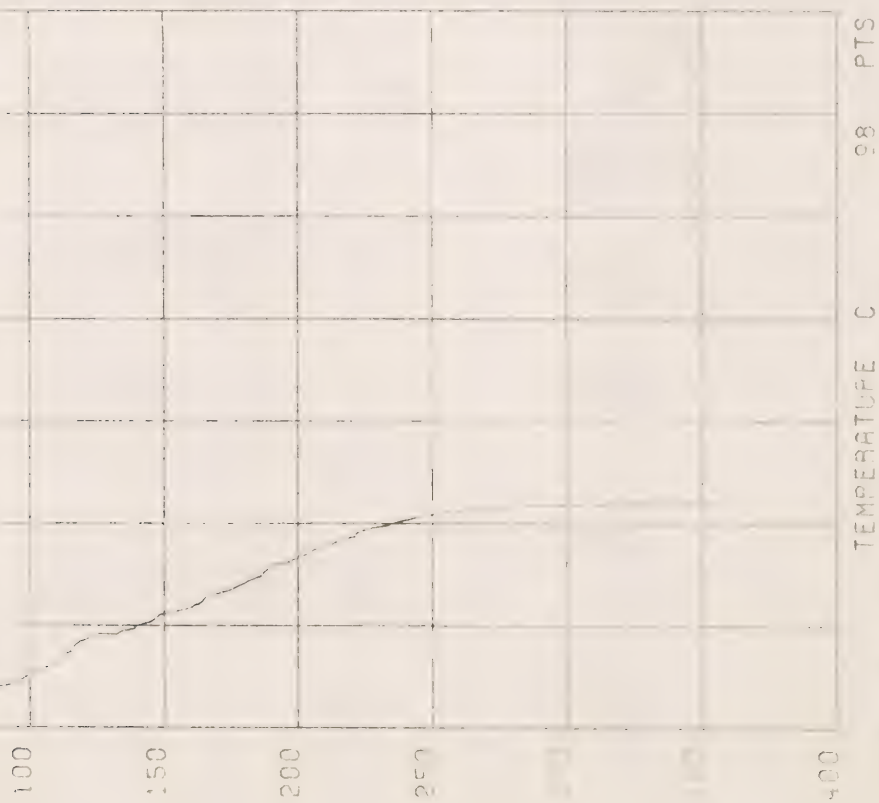
GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.340A	8.339	29.411A	2287	2287	1477.1A	47	2	4998
	20.0	20.2A	8.309A	8.307	29.444B	2290	2290	1477.2A	98	10	4971
	30.0	30.2A	7.511C	7.508	30.088C	2351	2351	1475.2W	145	22	4387
	50.0	50.4A	2.067C	2.064	31.681A	2534	2534	1454.9A	216	51	2646
	75.0	75.5	0.880	0.877	32.132	2577	2577	1450.6	276	89	2230
	100.0	100.7A	0.860A	0.856	32.446A	2603	2603	1451.3A	330	137	1990
	125.0	125.9A	1.576A	1.570	32.940A	2637	2637	1455.6W	376	191	1660
	150.0	151.0A	2.458B	2.450	33.464A	2673	2673	1460.6A	414	243	1330
	175.0	176.2A	3.891A	2.880	33.745A	2692	2692	1463.3A	445	295	1157
	200.0	201.4A	3.418A	3.405	34.004A	2707	2708	1466.3A	472	347	1109
	225.0	226.6A	3.861A	3.845	34.194A	2718	2718	1468.9A	496	401	914
	250.0	251.8A	4.033A	4.015	34.312A	2726	2726	1470.2A	518	455	846
	300.0	302.2A	4.263A	4.241	34.544A	2742	2742	1472.3A	557	562	700

PRESSURE DB



SALINITY 0/00 96 PTS
 CRUISE 51 STATION 120 TIME 1857 YEAR 69

PRESSURE DB

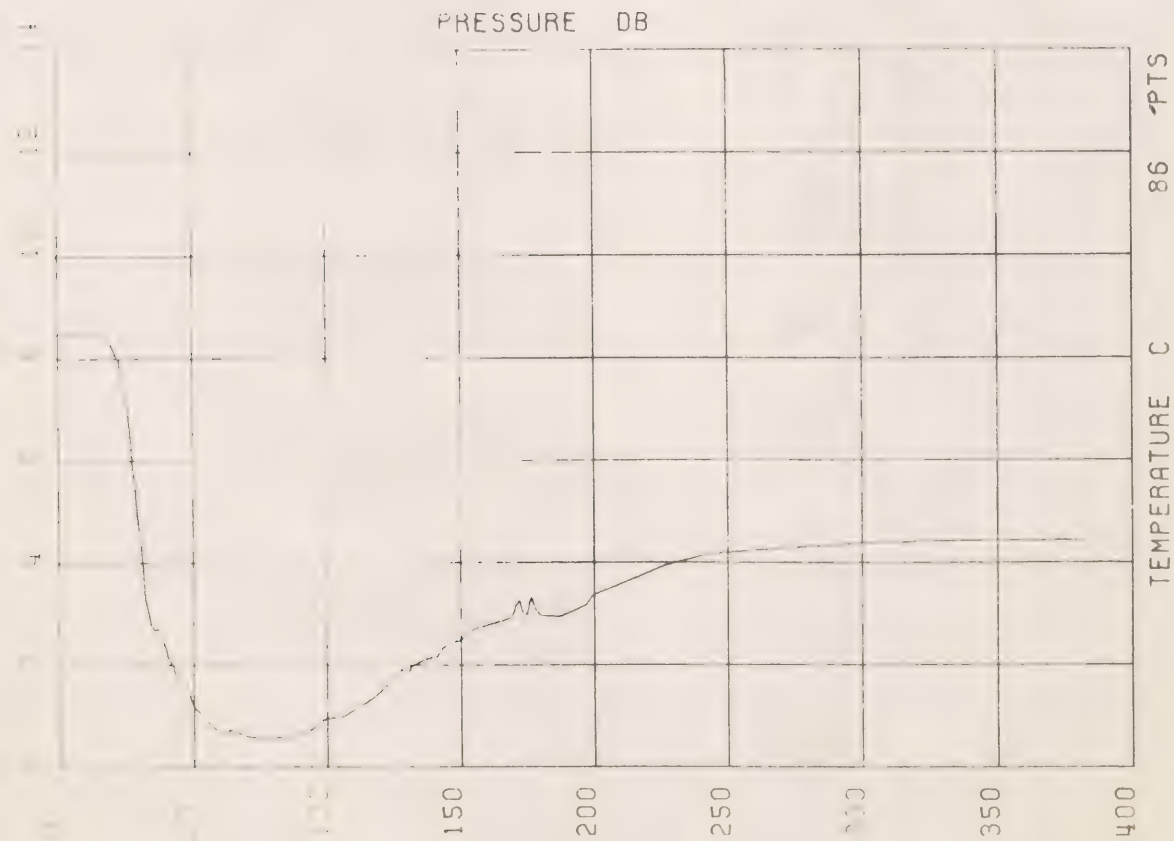
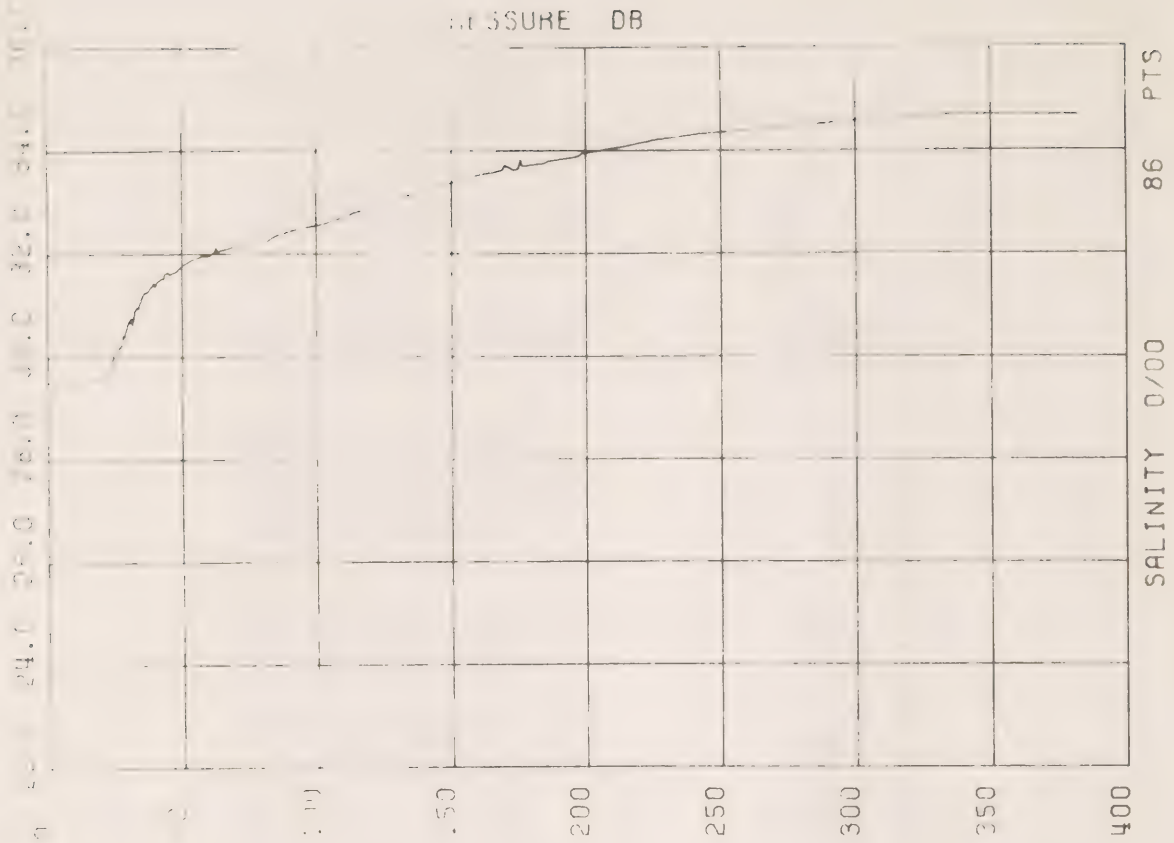


TEMPERATURE C 98 PTS
 CRUISE 51 STATION 120 TIME 1857 YEAR 69

CRUISE NUMBER 69051		STATION NUMBER 120	
LAT N49	15.00	YEAR 1969	WAVE-P/H
LONG W 64	20.00	MONTH 10	SWEL-P/H
DEPTH	368.0	DAY 02	SWEL-D
MARSD SQ		H/M 1856	BARO 1019.0
		WIND-DIR 290	WIND-SPD 18
		AIR-TEM 8.2	WET-BLB 6.5
		COUN 18	WV 02
		INST 10	CLD-A 2
		RESTR	
		UNAS GSPL4	

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.269A	8.268	29.351A	2283	2283	1476.8W	47	2	5034
	20.0	20.2A	8.178W	8.176	29.435A	2292	2292	1476.8A	98	11	4960
	30.0	30.2A	5.951A	5.949	30.262B	2385	2385	1469.1A	144	22	4068
	50.0	50.4A	1.461A	1.459	31.753A	2543	2543	1452.2A	207	47	2553
	75.0	75.5A	0.791W	0.788	32.176A	2581	2581	1450.2W	265	84	2192
	100.0	100.7A	1.053A	1.049	32.594A	2613	2613	1452.4A	317	131	1889
	125.0	125.9A	1.838C	1.832	33.081B	2647	2647	1457.0A	361	181	1572
	150.0	151.0A	2.234A	2.226	33.413A	2670	2670	1459.6A	398	233	1351
	175.0	176.2A	2.734A	2.724	33.717B	2691	2691	1462.6A	429	286	1163
	200.0	201.4A	3.360W	3.347	33.932W	2702	2702	1466.0W	458	340	1060
	225.0	226.6A	3.897A	3.881	34.183A	2717	2717	1469.0A	482	394	927
	250.0	251.8A	4.182A	4.164	34.350A	2727	2727	1470.8A	504	448	833
	300.0	302.2A	4.360W	4.337	34.539A	2740	2741	1472.7A	543	556	714



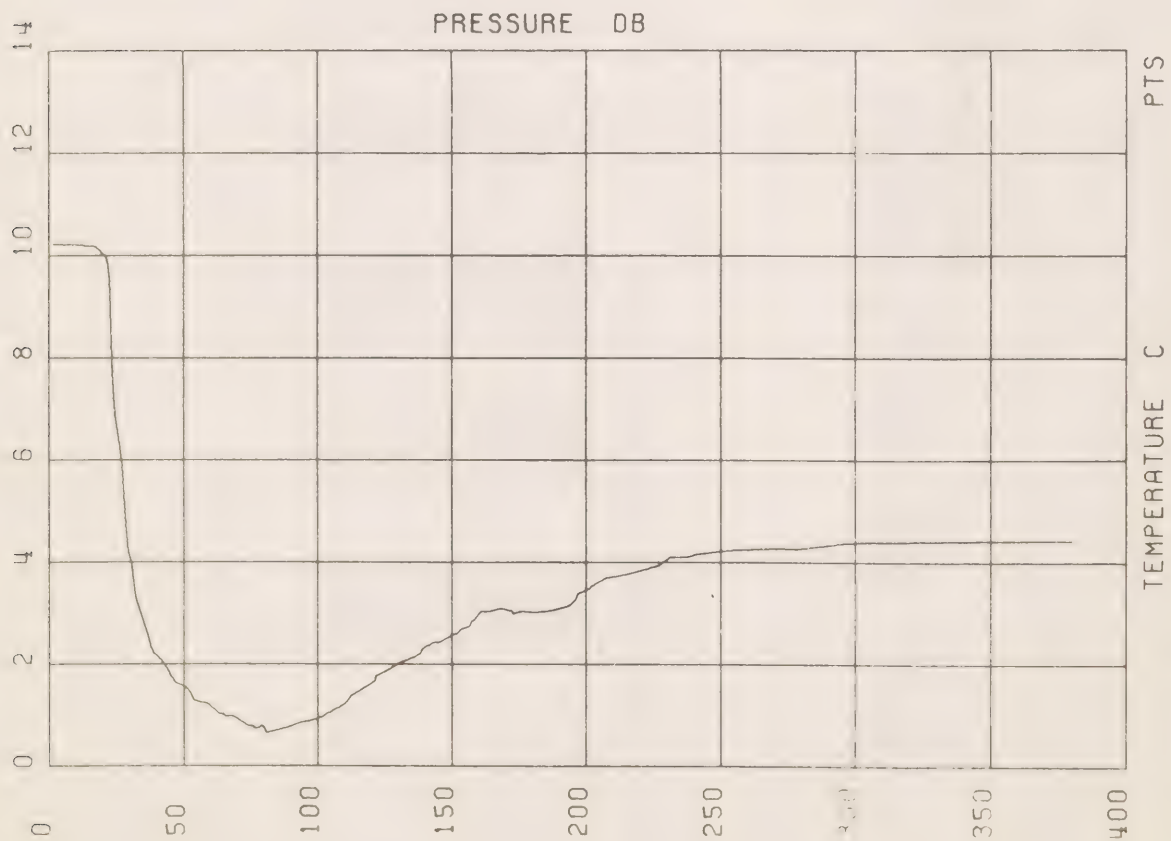
CRUISE NUMBER 69051 STATION NUMBER 121

LAT	N49	17.10	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	17.00	MONTH	10	SWEL-P/H	WIND-SPD	INST	10
DEPTH		388.0	DAY	02	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	1916	BARO	WET-BLB	UNAS	GSPL4

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	8.477A	8.475	29.530A	2294	2294	1477.8W	47	2	4929
	20.0	20.2A	8.238A	8.236	29.601A	2303	2303	1477.2A	97	10	4844
	30.0	30.2A	4.689B	4.687	30.691A	2432	2432	1464.5A	141	21	3615
	50.0	50.4A	1.169B	1.167	31.784A	2548	2548	1451.0A	200	45	2512
	75.0	75.5A	0.561W	0.558	32.176A	2582	2582	1449.2W	257	82	2179
	100.0	100.7A	0.946A	0.942	32.558A	2611	2611	1451.8A	309	128	1909
	125.0	125.9A	1.779A	1.773	33.032A	2643	2643	1456.6A	353	179	1607
	150.0	151.0A	2.502A	2.494	33.394A	2667	2667	1460.8A	390	232	1387
	175.0	176.2A	3.270B	3.259	33.755C	2690	2690	1465.0A	423	286	1178
	200.0	201.4A	3.389B	3.376	33.967A	2705	2705	1466.1A	451	341	1036
	225.0	226.6A	3.929A	3.913	34.208A	2718	2719	1469.2A	475	394	910
	250.0	251.8	4.190	4.172	34.357	2728	2728	1470.9	498	447	827
	300.0	302.2A	4.372A	4.349	34.576A	2743	2743	1472.8A	535	553	689

CRUISE 51	STATION 122	TIME 1944	YEAR 69
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CRUISE 51 STATION 122 TIME 1944 YEAR 69

Cruise Number 69051 Station Number 122

LAT	N49	14.90	YEAR	1969	WAVE-P/H	WIND-DIR	COUN	18
LONG	W 64	12.10	MONTH	10	SWEL-P/H	WIND-SPD	INST	10
DEPTH		384.0	DAY	02	SWEL-D	AIR-TEM	RESTR	
MARSD	SQ		H/M	2003	BARD	WET-BLB	UNAS	GSPL5

WW
CLD-A

I N T E R P O L A T E D

GMT	DEPTH	PRESS	TEMP	POT. T	SAL	SGMT	SGPT	SOUND	GEOA	CHI	SVA
	10.0	10.1A	10.208W	10.208	29.392A	2257	2257	1484.2W	46	2	5284
	20.0	20.2A	10.008B	10.006	29.427A	2263	2263	1483.6W	100	11	5228
	30.0	30.2A	4.052B	4.050	31.089B	2470	2470	1462.3A	142	21	3251
	50.0	50.4A	1.546A	1.544	31.780A	2545	2545	1452.7A	198	44	2539
	75.0	75.5A	0.765A	0.762	32.168W	2581	2581	1450.0W	257	82	2198
	100.0	100.7A	0.952A	0.948	32.560A	2611	2611	1451.9A	309	128	1909
	125.0	125.9	1.870	1.864	33.060	2645	2645	1457.1	353	179	1589
	150.0	151.0A	2.578A	2.569	33.462A	2672	2672	1461.2A	390	231	1342
	175.0	176.2A	3.020W	3.009	33.772A	2693	2693	1463.9A	421	282	1148
	200.0	201.4	3.520	3.507	34.038	2709	2709	1466.8	448	334	995
	225.0	226.6A	3.932W	3.916	34.222A	2719	2720	1469.3A	471	386	901
	250.0	251.8A	4.220A	4.202	34.404A	2731	2731	1471.1A	492	437	796
	300.0	302.2A	4.380A	4.357	34.576A	2743	2743	1472.8A	530	543	689

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